PT encoding RAIDD which is an adaptor molecule containing both death domain
PT and caspase recruitment domains, for treating hyperproliferative
PT disorder.
XX
PS Claim 3; Page 94; 144pp; English.
XX
CC The invention describes a compound (I) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule (II) encoding RAIDD which is an
CC adaptor molecule containing both death domain (DD) and caspase
CC recruitment domains (CARD), where (I) specifically hybridises with and
CC inhibits expression of RAIDD, or specifically hybridises with at least an
CC 8-nucleobase portion of an active site on (II). (I) is useful for
CC inhibiting the expression of RAIDD (Receptor interacting protein (RIP)
CC associated ICH-1/CED-3-homologous protein with death domain) in cells or
CC tissues, and for treating an animal having a disease or condition
CC associated with RAIDD, where the disease or condition is a
CC hyperproliferative disorder such as cancer, or a growth or metabolic
CC disorder. (I) is also useful for diagnostics, therapeutics, prophylaxis,
CC as research reagents and kits, for distinguishing functions of various
CC members of a biological pathway, and in antisense gene therapy. (I) is
CC also useful prophylactically, e.g. to prevent or delay infection,
CC inflammation or tumour formation. This sequence represents a mouse RAIDD
CC antisense oligonucleotide used to control expression of the RAIDD protein
XX
SQ Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 36 GTAGGCAGGAGGACCAGCA 54
| |||||||| | ||||||
Db 1 GAAGGCAGGATGTCCAGCA 19

RESULT 1026
ABQ75387
ID ABQ75387 standard; DNA; 20 BP.
XX
AC ABQ75387;
XX
DT 06-NOV-2002 (first entry)
XX
DE Human RNase HII antisense oligonucleotide SEQ ID NO:20.
XX
KW RNase H; antisense technology; inhibition; antisense oligonucleotide;
KW phosphorothioate; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl gapmer with an 8 nucleotide
FT deoxy gap and a phosphorothioate backbone; cytosine
FT residues are 5-methyl cytosines"
XX
PN WO200264841-A1.
XX
PD 22-AUG-2002.
XX
PF 12-FEB-2002; 2002WO-US004243.
XX
PR 12-FEB-2001; 2001US-00781712.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke ST, Lima WF, Wu H;
XX
DR WPI; 2002-657606/70.
XX
PT Use of a mammalian, particularly human, RNase H, for treating an animal
PT with a disease or condition associated with a human RNase H, for
PT inhibiting the expression of a protein, or for reducing cellular RNA via
PT antisense technology.
XX
PS Claim 38; Page 37; 70pp; English.
XX
CC The present invention describes a method for promoting the inhibition of
CC the expression of a protein comprising employing a mammalian RNase H
CC polypeptide so that cleavage of an RNA strand of an oligonucleotide-RNA
CC complex duplex occurs. Also described is a compound 8 to 50 nucleobases
CC in length targeted to the nucleic acid encoding the human RNase HII
CC polypeptide, where the compound specifically hybridises with and inhibits
CC the expression of a human RNase HII polypeptide. The compound, which is
CC an antisense oligonucleotide, is useful for inhibiting the expression of
CC a human RNase HII polypeptide in cells or tissues, as well as for
CC treating an animal with a disease or condition associated with a human
CC RNase HII polypeptide. The method is useful for inhibiting the expression
CC of a protein, particularly for reducing cellular RNA via antisense
CC technology. The present sequence represents a human RNase HII antisense
CC oligonucleotide, which is used in an example from the present invention
XX
SQ Sequence 20 BP; 4 A; 12 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 553 CCCCTCAGCCGCCGCCTCC 571
| |||||||||| || ||
Db 1 CGCCTCAGCCGCCACCACC 19

RESULT 1027
ABQ75387/c
ID ABQ75387 standard; DNA; 20 BP.
XX
AC ABQ75387;
XX
DT 06-NOV-2002 (first entry)
XX
DE Human RNase HII antisense oligonucleotide SEQ ID NO:20.
XX
KW RNase H; antisense technology; inhibition; antisense oligonucleotide;
KW phosphorothioate; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl gapmer with an 8 nucleotide
FT deoxy gap and a phosphorothioate backbone; cytosine
FT residues are 5-methyl cytosines"
XX
PN WO200264841-A1.
XX
PD 22-AUG-2002.
XX
PF 12-FEB-2002; 2002WO-US004243.
XX
PR 12-FEB-2001; 2001US-00781712.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Crooke ST, Lima WF, Wu H;
XX
DR WPI; 2002-657606/70.
XX
PT Use of a mammalian, particularly human, RNase H, for treating an animal
PT with a disease or condition associated with a human RNase H, for
PT inhibiting the expression of a protein, or for reducing cellular RNA via
PT antisense technology.

```
XX
PS   Claim 38; Page 37; 70pp; English.
XX
CC   The present invention describes a method for promoting the inhibition of
CC   the expression of a protein comprising employing a mammalian RNase H
CC   polypeptide so that cleavage of an RNA strand of an oligonucleotide-RNA
CC   complex duplex occurs. Also described is a compound 8 to 50 nucleobases
CC   in length targeted to the nucleic acid encoding the human RNase HII
CC   polypeptide, where the compound specifically hybridises with and inhibits
CC   the expression of a human RNase HII polypeptide. The compound, which is
CC   an antisense oligonucleotide, is useful for inhibiting the expression of
CC   a human RNase HII polypeptide in cells or tissues, as well as for
CC   treating an animal with a disease or condition associated with a human
CC   RNase HII polypeptide. The method is useful for inhibiting the expression
CC   of a protein, particularly for reducing cellular RNA via antisense
CC   technology. The present sequence represents a human RNase HII antisense
CC   oligonucleotide, which is used in an example from the present invention
XX
SQ   Sequence 20 BP; 4 A; 12 C; 3 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        234 TGGTGGTGGCGGCAGTGAC 252
              ||||||||||||| | | |
Db         20 TGGTGGTGGCGGCTGAGGC 2


RESULT 1028
ABL59026/c
ID   ABL59026 standard; DNA; 20 BP.
XX
AC   ABL59026;
XX
DT   20-AUG-2002  (first entry)
XX
DE   Nucleotide sequence of a human aurora 2 kinase inhibitor sas12.
XX
KW   Aurora 2 kinase; aurora 2 kinase inhibitor; cancer; ss.
XX
OS   Homo sapiens.
XX
PN   JP2002095479-A.
XX
PD   02-APR-2002.
XX
PF   22-SEP-2000; 2000JP-00287928.
XX
PR   22-SEP-2000; 2000JP-00287928.
XX
PA   (TANB ) TT PHARM INC.
XX
DR   WPI; 2002-439988/47.
XX
PT   New oligonucleotide targets and inhibits human aurora 2 kinase mRNA.
XX
PS   Claim 3; Fig 1; 12pp; Japanese.
XX
CC   The present sequence represents an oligonucleotide which targets
CC   polynucleotides encoding human aurora 2 kinase. The oligonucleotide
CC   inhibits aurora 2 kinase expression. The oligonucleotide is useful in the
CC   diagnosis and treatment of cancers
XX
SQ   Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        360 TGGGGAGAGTGACCAGGCT 378
              |||||| ||||||||  ||
Db         19 TGGGGAAAGTGACCACTCT 1


RESULT 1029
ABQ93219
ID   ABQ93219 standard; DNA; 20 BP.
XX
AC   ABQ93219;
XX
DT   29-AUG-2003  (revised)
DT   21-OCT-2002  (first entry)
XX
DE   T. tauschii/wheat D genome microsatellite cfd226 right PCR primer.
XX
KW   Microsatellite marker; wheat; D genome; mapping; genotyping;
KW   polymorphism; phenotypic trait; QTL; quantitative trait locus;
KW   disease-associated gene; development factor; quality factor;
KW   resistance factor; wheat product; identification; detection;
KW   genetically modified wheat; PCR; primer; ss.
XX
OS   Aegilops tauschii.
OS   Triticum aestivum.
XX
PN   EP1217079-A1.
XX
PD   26-JUN-2002.
XX
PF   22-DEC-2000; 2000EP-00403659.
XX
PR   22-DEC-2000; 2000EP-00403659.
XX
PA   (INRG ) INRA INST NAT RECH AGRONOMIQUE.
XX
PI   Bernard M,  Sourdille P,  Guyomarch H;
XX
DR   WPI; 2002-550410/59.
XX
PT   Map of wheat D genome comprising the genome location of a microsatellite
PT   marker, useful for e.g. identifying genes responsible for a desired
PT   phenotypic trait, especially quantitative trait loci in wheat, and
PT   diseases.
XX
PS   Claim 4; Page 8; 105pp; English.
XX
CC   The invention relates to a map of the bread wheat D genome comprising the
CC   genome location of a microsatellite marker selected from a group of 185
CC   such markers (ABQ92733-ABQ92917). The invention also encompasses the use
CC   of left (ABQ92918-ABQ93102) and right (ABQ93103-ABQ93287) primers to
CC   amplify and detect the microsatellite markers, and to identify genes
CC   responsible for a phenotypic trait of interest in wheat. Wheat is an
CC   allohexaploid species consisting of 3 diploid genomes designated A, B and
CC   D, resulting from two successive intercrossings involving at least three
CC   different species. The D genome is thought to have been introduced in the
CC   most recent intercrossing, between the amphiploid AABB and Triticum
CC   tauschii (DD), probably involving only a limited number of genotypes of
CC   both species. Due to its polyploid genome, the large size of its genome,
CC   and its low level of polymorphism, the genetic mapping of wheat has to
CC   date been difficult. Microsatellites are tandemly repeated sequences
CC   between one and six nucleotides long, and are very polymorphic in length,
CC   mainly due to polymerase slippage during replication. This high degree of
CC   polymorphism makes them especially suitable for the genetic mapping of
CC   species which show little intraspecies polymorphism, such as wheat. In
CC   addition, microsatellites are codominant, and exhibit Mendelian
CC   inheritance. The 185 microsatellite markers of the invention are
CC   developed from the ancestral diploid donor species Triticum tauschii and
CC   map to the wheat D genome, which is less polymorphic than the A or B
CC   genomes. These microsatellite markers thus help to overcome some of the
CC   problems associated with the genetic mapping of wheat. The wheat D genome
CC   map and the microsatellite markers and associated primers of the
CC   invention are useful for identifying genes responsible for a phenotypic
CC   trait of interest, most notably QTLs (quantitative trait loci). In
CC   particular they may be used for analysing genes and alleles implicated in
CC   disease and for identifying development factors, quality factors and
CC   factors conferring resistance to pathogens and xenobiotics. The
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CC   microsatellite markers, and associated primers may be also be used in
CC   mapping and genotyping diploid and polyploid species of Triticum,
CC   particularly Aegilops, Triticum monococcum, Triticum durum, Triticum
CC   aestivum, or related species; for identifying cultivars and hybrids of
CC   Triticum and related species; to assess whether or not a product
CC   comprises wheat or a related species; and to assess whether or not a
CC   product comprises genetically modified wheat. The present sequence
CC   represents a specifically claimed Triticum tauschii/wheat genome D
CC   microsatellite marker right PCR primer of the invention. (Updated on 29-
CC   AUG-2003 to standardise OS field)
XX
SQ   Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        792 CGTTACGCTACATGACATT 810
              || || ||| |||||||||
Db          2 CGCTATGCTTCATGACATT 20


RESULT 1030
ABA89986
ID   ABA89986 standard; DNA; 20 BP.
XX
AC   ABA89986;
XX
DT   11-FEB-2002  (first entry)
XX
DE   Oestrogen receptor alpha gene PCR primer #14.
XX
KW   Human; oestrogen receptor alpha; ESR-alpha; ER; chromosome 6; Syne-2;
KW   synaptic nuclei expressed gene 2; haplotype; cytostatic; osteopathic;
KW   cardiant; vasotropic; gene therapy; vaccine; cancer; osteoporosis;
KW   cardiovascular disease; oestrogen receptor; PCR primer; sequencing; ss.
XX
OS   Homo sapiens.
XX
PN   WO200162969-A2.
XX
PD   30-AUG-2001.
XX
PF   20-FEB-2001; 2001WO-US005358.
XX
PR   22-FEB-2000; 2000US-0183756P.
PR   20-OCT-2000; 2000US-00692414.
PR   24-JAN-2001; 2001US-00768184.
XX
PA   (PEKE ) PE CORP NY.
XX
PI   Kalush F,  Cassel MJ,  Hwang SS,  Winn-Deen ES;
XX
DR   WPI; 2002-041152/05.
XX
PT   Novel variant of estrogen receptor alpha polypeptide useful for
PT   determining the biological activity of a protein for high throughput
PT   screening and for raising antibodies that elicit an immune response in
PT   host.
XX
PS   Claim 17; Fig 2c; 333pp; English.
XX
CC   The present invention describes an isolated peptide (I) consisting of an
CC   amino acid sequence selected from: (a) the amino acid sequence of a
CC   variant of the oestrogen receptor alpha (ESR-alpha) protein in AAG68251;
CC   or (b) a fragment comprising at least 10 contiguous amino acids of the
CC   protein in AAG68251. (I) has cytostatic, osteopathic, cardiant and
CC   vasotropic activities, and can be used in gene therapy and vaccine
CC   production. (I) is useful for identifying an agent that binds to (I), by
CC   contacting (I) with an agent and assaying the contacted mixture to
CC   determine whether a complex is formed with the agent bound to the
CC   peptide. A polynucleotide (II), encoding (I), is useful in the
CC   development of diagnostics and therapies for diseases and disorders
CC   mediated/modulated by an oestrogen receptor (ER). (II) is also useful in
CC   gene therapy for treating cancer, osteoporosis and cardiovascular
CC   diseases. The human ESR-alpha gene is located on chromosome 6. ABA89973
CC   to ABA90010 represent PCR primers, and ABA90011 to ABA90037 represent
CC   sequencing primers, for the human ESR-alpha gene, which are used in an
CC   example from the present invention
XX
SQ   Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        826 TCCCTCACCCTTGTCTTTG 844
              |||| || |||||||||| |
Db          1 TCCCACAGCCTTGTCTTGG 19


RESULT 1031
AAD39532
ID   AAD39532 standard; DNA; 20 BP.
XX
AC   AAD39532;
XX
DT   04-OCT-2002  (first entry)
XX
DE   Human calreticulin antisense oligonucleotide, ISIS 109325.
XX
KW   Human; calreticulin; antisense compound; hyperproliferative disorder;
KW   cancer; autoimmune disease; viral infection; cardiovascular disease;
KW   antisense therapy; cytostatic; immunosuppressive; virucide; antisense;
KW   phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   2
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   5
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   6. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   7
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   10
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  h
FT                   /mod_base= m5c
FT   modified_base   16
FT                   /*tag=  i
FT                   /mod_base= m5c
FT   modified_base   17
FT                   /*tag=  j
FT                   /mod_base= m5c
XX
PN   WO200236743-A2.
XX
```

PD 10-MAY-2002.
XX
PF 30-OCT-2001; 2001WO-US049045.
XX
PR 30-OCT-2000; 2000US-00702327.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Cowsert LM;
XX
DR WPI; 2002-479759/51.
XX
PT Novel antisense compound targeted to nucleic acid encoding calreticulin,
PT useful for treating a human having disease or condition associated with
PT calreticulin e.g. cancer, viral infection, autoimmune disease.
XX
PS Claim 3; Page 82; 109pp; English.
XX
CC The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of calreticulin. The compositions comprise
CC antisense compounds, particularly antisense oligonucleotides, targetted
CC to nucleic acids encoding calreticulin. The antisense compound is useful
CC for inhibiting the expression of calreticulin in human cells or tissues.
CC It is also useful for treating a human having a disease or condition
CC associated with calreticulin, e.g., hyperproliferative disorder e.g.
CC cancer, autoimmune disease, viral infection or cardiovascular disease, by
CC inhibiting expression of calreticulin. It is useful for diagnostics,
CC therapeutics, prophylaxis and as research reagents and kits. It is also
CC used in antisense therapy. The present sequence is an antisense compound
CC targetted to human calreticulin. This sequence is used to study the
CC antisense inhibition of calreticulin expression-phosphorothioate 2'-MOE
CC gapmer oligonucleotides
XX
SQ Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 928 CAGCTGCTCCGTGGCCTGG 946
||||| ||| ||||||||
Db 2 CAGCTCGTCCTTGGCCTGG 20

RESULT 1032
ABL44407
ID ABL44407 standard; DNA; 20 BP.
XX
AC ABL44407;
XX
DT 11-APR-2002 (first entry)
XX
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:1451.
XX
KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
PN JP2001321190-A.
XX
PD 20-NOV-2001.
XX
PF 12-MAR-2001; 2001JP-00068285.
XX
PR 10-MAR-2000; 2000JP-00066716.
XX
PA (RIKA) RIKAGAKU KENKYUSHO.
PA (GENO-) GENOTEX YG.
XX
DR WPI; 2002-144136/19.
XX
PT Arraying genome clones.
XX
PS Claim 4; Page 33; 528pp; Japanese.
XX
CC The present invention describes a method of arraying genome clones. The
CC method comprises: (a) clones of the genomic libraries contained in
CC multiwell plates numbered for discrimination are mixed in each of the
CC multiwell plates; (b) a primer designed based on the chromosome marker
CC sequence is added to the mixture to carry out an amplification reaction;
CC (c) a signal corresponding to the marker is detected from the resultant
CC amplified product to specify the discrimination Nos. of the multiwell
CC plates containing the clones having said marker sequence; (d) the order
CC of the markers is changed so that the same discrimination Nos. succeed to
CC the maximum in the specified discrimination Nos. to array the multiwell
CC plates; (e) the clones in the multiwell plates of the specified
CC discrimination Nos. are mixed respectively in each wells of longitudinal
CC and lateral directions; (f) the mixed clones are cultured and the
CC resultant cultures are amplified by using the above primer; (g) signals
CC are detected from the amplified products; (h) the clones in the multiwell
CC plates are specified from the detected result; and (i) the clones are
CC reconstituted as the positions on the chromosome and arrayed. The
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC represent PCR primers for human chromosome 21q22.1, which are
CC specifically claimed for use in the present invention
XX
SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1526 TTCAGCTACAAAAGGAGGC 1544
||||||||| | ||||||
Db 1 TTCAGCTACGTATGGAGGC 19

RESULT 1033
ABT05202
ID ABT05202 standard; DNA; 20 BP.
XX
AC ABT05202;
XX
DT 11-OCT-2002 (first entry)
XX
DE TNFR1 expression modulation related antisense oligo SEQ ID No 232.
XX
KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
KW mouse; murine; ds.
XX
OS Mus sp.
XX
PN WO200248168-A1.
XX
PD 20-JUN-2002.
XX
PF 22-OCT-2001; 2001WO-US051224.
XX
PR 24-OCT-2000; 2000US-00695451.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowsert LM, Zhang H, Dean NM;
XX
DR WPI; 2002-583481/62.
XX
PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
PS Example 21; Page 62; 121pp; English.
XX
CC The invention relates to an antisense compound 8 to 30 nucleotides in

CC length targeted to nucleic acid molecule encoding tumour necrosis factor
CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
CC TNFR1. The antisense compound is useful for inhibiting the expression of
CC TNFR1 in cells or tissues. The antisense compound is also useful for
CC treating an animal (preferably human) having a disease or condition
CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
CC the expression of TNFR1. The antisense compound is useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC This polynucleotide sequence represents a mouse oligonucleotide relating
CC to the TNFR1 of the invention
XX
SQ Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1565 TGCCTGACTCAGGCAGGCC 1583
|| ||| ||||||||| ||
Db 1 TGGCTGGCTCAGGCAGTCC 19

RESULT 1034
ABK27372/c
ID ABK27372 standard; DNA; 20 BP.
XX
AC ABK27372;
XX
DT 09-APR-2002 (first entry)
XX
DE Mutant gamma-aminobutyric acid receptor GABARD subunit PCR primer #15.
XX
KW Human; Anticonvulsant; Tranquiliser; Antimanic; Antidepressant;
KW Nootropic; Neuroprotective; Neuroleptic; Antimigraine; Anorectic;
KW gamma-aminobutyric acid receptor subunit; GABA; epilepsy; anxiety;
KW manic depression; phobic obsessive symptom; Alzheimer's disease;
KW schizophrenia; migraine; obesity; receptor; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200198486-A1.
XX
PD 27-DEC-2001.
XX
PF 20-JUN-2001; 2001WO-AU000729.
XX
PR 20-JUN-2000; 2000AU-00008260.
PR 13-SEP-2000; 2000AU-00000098.
PR 11-MAY-2001; 2001AU-00004953.
XX
PA (BION-) BIONOMICS LTD.
XX
PI Wallace RH, Mulley JC, Berkovic SF, Harkin LA, Dibbens LM;
XX
DR WPI; 2002-122280/16.
XX
PT Mutant gamma-aminobutyric acid receptor subunits and DNA molecule, useful
PT for diagnosing epilepsy, Alzheimer's disease, migraine, obesity, anxiety,
PT manic depression and schizophrenia.
XX
PS Example 5; Page 52; 99pp; English.
XX
CC The invention relates to an isolated mammalian polypeptide (I), which is
CC a mutant of gamma-aminobutyric acid (GABA) receptor subunit. The mutation
CC disrupts the functioning of an assembled GABA receptor, its functional
CC fragment or homologue, and creates a phenotype of epilepsy, anxiety,
CC manic depression, phobic obsessive symptoms, Alzheimer's disease,
CC schizophrenia, migraine and/or obesity. (I), the polynucleotide (II)
CC encoding (I) and antibody (III) to (I) are useful in the diagnosis of
CC epilepsy, anxiety, manic depression, phobic obsessive symptoms,
CC Alzheimer's disease, schizophrenia, migraine and/or obesity. (III) is
CC useful for treating the above conditions. (I)-(III) are useful in
CC screening of candidate pharmaceutical agents, where high-throughput
CC screening techniques are employed. (II) is useful to detect and
CC quantitate gene expression in biological samples. Oligonucleotides or
CC longer fragments derived from (II) are useful as probes in a microarray
CC used to monitor the expression level of large number of genes. (I)-(III)
CC are useful for the study of the function of a GABA receptor, to study the
CC mechanism of the disease as related to GABA receptor, for the creation of
CC explanted mammalian cultures which express a mutant GABA receptor and for
CC the evaluation of potential therapeutic interventions. ABK27332-ABK27399
CC represent mutant gamma-aminobutyric acid receptor subunit coding
CC sequences and PCR primers of the invention
XX
SQ Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1085 AGGTGGTGACACTGTGGTA 1103
||||||| || ||| |||
Db 19 AGGTGGTGCCATTGTCGTA 1

RESULT 1035
ABA94547
ID ABA94547 standard; DNA; 20 BP.
XX
AC ABA94547;
XX
DT 09-APR-2002 (first entry)
XX
DE Mycosphaerella species ribosomal gene-specific primer ITS2.
XX
KW Fungal; pathogen; banana; polymerase chain reaction; Mycosphaerella;
KW internal transcribed spacer; ITS; PCR primer; ss.
XX
OS Synthetic.
OS Mycosphaerella sp.
XX
PN WO200196600-A2.
XX
PD 20-DEC-2001.
XX
PF 15-JUN-2001; 2001WO-EP006783.
XX
PR 16-JUN-2000; 2000US-0211902P.
XX
PA (SYGN) SYNGENTA PARTICIPATIONS AG.
XX
PI Barnett CJ, Beck JJ;
XX
DR WPI; 2002-130742/17.
XX
PT Novel oligonucleotide primer useful for polymerase chain reaction-based
PT detection of Mycosphaerella species, a banana fungal pathogen.
XX
PS Example 4; Page 23; 27pp; English.
XX
CC The invention relates to oligonucleotide primers for use in polymerase
CC chain reaction (PCR)-based detection of a Mycosphaerella sp., a fungal
CC pathogen of banana. The method involves isolating DNA from a plant tissue
CC infected with Mycosphaerella sp., amplifying a part of ITS (internal
CC transcribed spacer) sequence using the DNA as template in PCR with the
CC specified primer pairs and detecting Mycosphaerella sp. by visualizing
CC the amplified part of ITS sequence. The primers enable the detection of
CC specific isolates of fungal pathogens and the monitoring of disease
CC development in plant populations. Sequences ABA94546-549 represent
CC ribosomal gene-specific primers synthesised for testing in combination
CC with the primers specific for the ITS regions
XX
SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;

```
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1549 CTTCGGTCTTCGTCGATGC 1567
              || || ||||| |||||||
Db          2 CTGCGTTCTTCATCGATGC 20


RESULT 1036
ABA94548/c
ID   ABA94548 standard; DNA; 20 BP.
XX
AC   ABA94548;
XX
DT   09-APR-2002  (first entry)
XX
DE   Mycosphaerella species ribosomal gene-specific primer ITS3.
XX
KW   Fungal; pathogen; banana; polymerase chain reaction; Mycosphaerella;
KW   internal transcribed spacer; ITS; PCR primer; ss.
XX
OS   Synthetic.
OS   Mycosphaerella sp.
XX
PN   WO200196600-A2.
XX
PD   20-DEC-2001.
XX
PF   15-JUN-2001; 2001WO-EP006783.
XX
PR   16-JUN-2000; 2000US-0211902P.
XX
PA   (SYGN ) SYNGENTA PARTICIPATIONS AG.
XX
PI   Barnett CJ,  Beck JJ;
XX
DR   WPI; 2002-130742/17.
XX
PT   Novel oligonucleotide primer useful for polymerase chain reaction-based
PT   detection of Mycosphaerella species, a banana fungal pathogen.
XX
PS   Example 4; Page 23; 27pp; English.
XX
CC   The invention relates to oligonucleotide primers for use in polymerase
CC   chain reaction (PCR)-based detection of a Mycosphaerella sp., a fungal
CC   pathogen of banana. The method involves isolating DNA from a plant tissue
CC   infected with Mycosphaerella sp., amplifying a part of ITS (internal
CC   transcribed spacer) sequence using the DNA as template in PCR with the
CC   specified primer pairs and detecting Mycosphaerella sp. by visualizing
CC   the amplified part of ITS sequence. The primers enable the detection of
CC   specific isolates of fungal pathogens and the monitoring of disease
CC   development in plant populations. Sequences ABA94546-549 represent
CC   ribosomal gene-specific primers synthesised for testing in combination
CC   with the primers specific for the ITS regions
XX
SQ   Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1549 CTTCGGTCTTCGTCGATGC 1567
              || || ||||| |||||||
Db         19 CTGCGTTCTTCATCGATGC 1


RESULT 1037
ABV78756/c
ID   ABV78756 standard; DNA; 20 BP.
XX
AC   ABV78756;
XX
DT   14-JAN-2003  (first entry)
XX
DE   Cordyceps PCR primer ITS3.
XX
KW   Ribosome ribonucleic acid; rRNA; Cordyceps crassispora; classification;
KW   Cordyceps sinensis; ss; PCR; primer.
XX
OS   Cordyceps sp.
XX
PN   JP2002204696-A.
XX
PD   23-JUL-2002.
XX
PF   12-JAN-2001; 2001JP-00004805.
XX
PR   12-JAN-2001; 2001JP-00004805.
XX
PA   (HEAL-) HEALTHWAY KK.
PA   (KANE/) KANESHIRO N.
XX
DR   WPI; 2002-639075/69.
XX
PT   Ribosome RNA gene base sequence of Cordyceps sinensis for classification
PT   of seeds of Cordyceps sinensis.
XX
PS   Disclosure; Page 11; 33pp; Japanese.
XX
CC   The invention relates to a novel base sequence which is part of a fully
CC   defined ribosome ribonucleic acid (rRNA) gene of Cordyceps crassispora.
CC   The base sequences can be used for the classification of Cordyceps
CC   sinensis. The sequence represents a PCR primer used in the invention
XX
SQ   Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1549 CTTCGGTCTTCGTCGATGC 1567
              || || ||||| |||||||
Db         19 CTGCGTTCTTCATCGATGC 1


RESULT 1038
ABV78755
ID   ABV78755 standard; DNA; 20 BP.
XX
AC   ABV78755;
XX
DT   14-JAN-2003  (first entry)
XX
DE   Cordyceps PCR primer ITS2.
XX
KW   Ribosome ribonucleic acid; rRNA; Cordyceps crassispora; classification;
KW   Cordyceps sinensis; ss; PCR; primer.
XX
OS   Cordyceps sp.
XX
PN   JP2002204696-A.
XX
PD   23-JUL-2002.
XX
PF   12-JAN-2001; 2001JP-00004805.
XX
PR   12-JAN-2001; 2001JP-00004805.
XX
PA   (HEAL-) HEALTHWAY KK.
PA   (KANE/) KANESHIRO N.
XX
DR   WPI; 2002-639075/69.
XX
PT   Ribosome RNA gene base sequence of Cordyceps sinensis for classification
PT   of seeds of Cordyceps sinensis.
XX
```

```
PS   Disclosure; Page 11; 33pp; Japanese.
XX
CC   The invention relates to a novel base sequence which is part of a fully
CC   defined ribosome ribonucleic acid (rRNA) gene of Cordyceps crassispora.
CC   The base sequences can be used for the classification of Cordyceps
CC   sinensis. The sequence represents a PCR primer used in the invention
XX
SQ   Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1549 CTTCGGTCTTCGTCGATGC 1567
              || || ||||| |||||||
Db          2 CTGCGTTCTTCATCGATGC 20


RESULT 1039
AAD34903
ID   AAD34903 standard; DNA; 20 BP.
XX
AC   AAD34903;
XX
DT   16-JUL-2002  (first entry)
XX
DE   Human E2F transcription factor 2 antisense oligo, ISIS #114100.
XX
KW   Human; E2F transcription factor 2; hyperproliferative disorder; cancer;
KW   developmental disorder; antisense; therapy; phosphorothioate backbone;
KW   cytostatic; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1. .5
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   2
FT                   /*tag= c
FT                   /mod_base= m5c
FT   modified_base   4
FT                   /*tag= d
FT                   /mod_base= m5c
FT   modified_base   5
FT                   /*tag= e
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag= f
FT                   /mod_base= m5c
FT   modified_base   9
FT                   /*tag= g
FT                   /mod_base= m5c
FT   modified_base   10
FT                   /*tag= h
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag= i
FT                   /mod_base= m5c
FT   modified_base   14
FT                   /*tag= j
FT                   /mod_base= m5c
FT   modified_base   16. .20
FT                   /*tag= k
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   20
FT                   /*tag= l
FT                   /mod_base= m5c
XX
PN   WO200220551-A1.
XX
PD   14-MAR-2002.
XX
PF   07-SEP-2001; 2001WO-US028202.
XX
PR   08-SEP-2000; 2000US-00658679.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Popoff I,  Wyatt JR;
XX
DR   WPI; 2002-329864/36.
XX
PT   New antisense oligonucleotides targeted to a nucleic acid encoding E2F
PT   transcription factor 2, useful for treating a disease or condition
PT   associated with E2F transcription factor 2, e.g. hyperproliferative
PT   disorders, such as cancer.
XX
PS   Claim 3; Page 92; 120pp; English.
XX
CC   The present invention relates to antisense oligonucleotides, compounds
CC   and methods for modulating the expression of E2F transcription factor 2.
CC   The antisense oligonucleotides specifically hybridise with and inhibit
CC   the expression of E2F transcription factor 2. They are useful for
CC   inhibiting the expression of E2F transcription factor 2 and for treating
CC   diseases or conditions associated with E2F transcription factor 2, such
CC   as hyperproliferative disorders, particularly cancer and developmental
CC   disorders. They may also be used as research reagents and diagnostics, to
CC   distinguish between functions of various members of a biological pathway
CC   and in the treatment of a disease or disorder which can be treated by
CC   modulating the expression of E2F transcription factor 2. The oligomeric
CC   compounds, particularly the antisense oligonucleotides may be used to
CC   modulate the function of nucleic acid molecules encoding E2F
CC   transcription factor 2, ultimately modulating the amount of E2F
CC   transcription factor produced. Sequences of the invention are also used
CC   in antisense therapy. The present DNA sequence is human E2F transcription
CC   factor 2 antisense oligonucleotide with a phosphorothioate backbone. This
CC   sequence is targetted to the coding region of human E2F transcription
CC   factor 2
XX
SQ   Sequence 20 BP; 1 A; 9 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1387 CTCCTCACCAAGCTGTTGC 1405
              ||||| || |||||||||
Db          2 CTCCTGCCCCAGCTGTTGC 20


RESULT 1040
AAD38471
ID   AAD38471 standard; DNA; 20 BP.
XX
AC   AAD38471;
XX
DT   10-SEP-2002  (first entry)
XX
DE   Bovine MHC class I exon 2 amplifying PCR primer, BoC1FP-E2B.
XX
KW   Bovine; immunological rejection; nuclear transfer; NT; immune response;
KW   MHC-I; major histocompatibility complex; embryo transfer; PCR; primer;
KW   MHC class I exon 2 DNA; ss.
XX
OS   Bos sp.
XX
PN   WO200229000-A2.
XX
```

PD 11-APR-2002.
XX
PF 03-OCT-2001; 2001WO-US030925.
XX
PR 03-OCT-2000; 2000US-0237673P.
XX
PA (CORR) CORNELL RES FOUND INC.
XX
PI Davies CJ, Schlafer DH, Hill JR;
XX
DR WPI; 2002-444101/47.
XX
PT Minimizing immunological rejection of nuclear transfer fetuses, by
PT transferring the nuclear transfer embryo into an embryo recipient for
PT development of the fetus.
XX
PS Example 1; Page 71; 103pp; English.
XX
CC The present invention relates to a method of minimising immunological
CC rejection of a nuclear transfer (NT) foetus by transferring a nuclear
CC transfer embryo into an embryo recipient under conditions effective for
CC the development of a nuclear transfer foetus with minimal risk of
CC immunological rejection of the foetus due to maternal anti-foetal major
CC histocompatibility complex (MHC)-I immune response. The method is useful
CC for minimising immunological rejection of a NT foetus. It is also useful
CC for performing embryo transfer. The present DNA sequence is a PCR primer
CC which is used for amplifying bovine MHC class I exon 2 DNA. This sequence
CC is used in the exemplification of the invention
XX
SQ Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1593 CGTGGTGGACACCGAGTTC 1611
||||| ||||| ||||||
Db 2 CGTGGACGACACGGAGTTC 20

RESULT 1041
AAS96666/c
ID AAS96666 standard; DNA; 20 BP.
XX
AC AAS96666;
XX
DT 09-APR-2002 (first entry)
XX
DE Telomerase reverse transcriptase, antisense oligonucleotide #76.
XX
KW Telomerase reverse transcriptase; TERT; cytostatic; apoptosis;
KW cell growth inhibitor; antisense oligonucleotide; antisense technology;
KW ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200188198-A1.
XX
PD 22-NOV-2001.
XX
PF 15-MAY-2001; 2001WO-US015774.
XX
PR 16-MAY-2000; 2000US-00572423.
PR 07-DEC-2000; 2000US-00733294.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP, Gaarde WA, Freier SM, Wancewicz E;
XX
DR WPI; 2002-075321/10.
XX
PT New compound targeted to nucleic acid molecule encoding telomerase
PT transcriptase (TERT), which specifically hybridizes with and inhibits
PT expression of TERT, useful for modulating apoptosis and inhibiting cell
PT growth.
XX
PS Claim 26; Page 91; 154pp; English.
XX
CC The invention describes a compound, 8-50 nucleobases in length targeted
CC to a nucleic acid molecule encoding human TERT (telomerase reverse
CC transcriptase), where the compound specifically hybridises with and
CC inhibits the expression of TERT. A series of oligonucleotides were
CC designed to target different regions of the human TERT RNA. These were 20
CC nucleotides in length and composed of a central gap region consisting of
CC ten 2'-deoxynucleotides, flanked on both sides (5' and 3' directions) by
CC five-nucleotide wings. The wings were composed of 2'-methoxyethyl (2'-
CC MOE) nucleotides. The compounds were analysed for their effect on human
CC TERT mRNA levels by reverse transcriptase (RT)-polymerase chain reaction
CC (PCR). The compound is useful for inhibiting the expression of TERT in
CC cells or tissues, for treating a human having disease or condition
CC associated with TERT, for modulating apoptosis, for inhibiting cell
CC growth (preferably, cancer cell growth), in antisense therapy and for
CC diagnostics and therapeutics. This sequence is an antisense
CC oligonucleotide used to modulate the activity of nucleic acid molecules
CC encoding TERT, described in the method of the invention
XX
SQ Sequence 20 BP; 7 A; 9 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 352 GGGTCTGATGGGGAGAGTG 370
|||||||||| || || ||
Db 20 GGGTCTGATGTGGTGACTG 2

RESULT 1042
ABI95967/c
ID ABI95967 standard; DNA; 20 BP.
XX
AC ABI95967;
XX
DT 16-FEB-2002 (first entry)
XX
DE Capture oligonucleptide Zip ID#3054 oligo #9.
XX
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
OS Synthetic.
XX
PN WO200179548-A2.
XX
PD 25-OCT-2001.
XX
PF 04-APR-2001; 2001WO-US010958.
XX
PR 14-APR-2000; 2000US-0197271P.
XX
PA (CORR) CORNELL RES FOUND INC.
XX
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
DR WPI; 2002-034366/04.
XX
PT Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX
PS Example 5; Fig 29; 300pp; English.
XX
CC The present invention describes a method (M1) for designing capture

CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridise with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus
CC medinesis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. ABI82074 to
CC ABI97546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX
SQ Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        922 CTGTTCCAGCTGCTCCGTG 940
              ||| ||| ||| |||||||
Db         19 CTGGTCCGGCTACTCCGTG 1
```

RESULT 1043
ABI93287/c
ID ABI93287 standard; DNA; 20 BP.
XX
AC ABI93287;
XX
DT 15-FEB-2002 (first entry)
XX
DE Capture oligonucleptide Zip ID#374 oligo #9.
XX
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
OS Synthetic.
XX
PN WO200179548-A2.
XX
PD 25-OCT-2001.
XX
PF 04-APR-2001; 2001WO-US010958.
XX
PR 14-APR-2000; 2000US-0197271P.
XX
PA (CORR) CORNELL RES FOUND INC.
XX
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
DR WPI; 2002-034366/04.
XX
PT Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX
PS Example 5; Fig 29; 300pp; English.
XX
CC The present invention describes a method (M1) for designing capture

CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridise with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus
CC medinesis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food
CC and feed industry, detecting comprises scanning (using e.g. a scanning
CC electron microscope and infrared microscope) the support at the
CC particular sites and identifying if ligation of the oligonucleotide probe
CC sets occurred and correlating (using a computer) identified ligation to a
CC presence or absence of the target nucleotide sequences. ABI82074 to
CC ABI97546 represent oligonucleotide sequences used in the exemplification
CC of the present invention
XX
SQ Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
Qy        999 GCTCATCAACGAGAGGGGA 1017
              ||||||||  |||| ||||
Db         19 GCTCATCACAGAGACGGGA 1
```

RESULT 1044
ABI93148/c
ID ABI93148 standard; DNA; 20 BP.
XX
AC ABI93148;
XX
DT 15-FEB-2002 (first entry)
XX
DE Capture oligonucleptide Zip ID#235 oligo #9.
XX
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
OS Synthetic.
XX
PN WO200179548-A2.
XX
PD 25-OCT-2001.
XX
PF 04-APR-2001; 2001WO-US010958.
XX
PR 14-APR-2000; 2000US-0197271P.
XX
PA (CORR) CORNELL RES FOUND INC.
XX
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
DR WPI; 2002-034366/04.
XX
PT Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch.
XX
PS Example 5; Fig 29; 300pp; English.
XX
CC The present invention describes a method (M1) for designing capture

```
CC   oligonucleotide probes (I) for use on a support to which complementary
CC   oligonucleotide probes (II) will hybridise with little mismatch, where
CC   (I) have melting temperatures within a narrow range. The method is useful
CC   for detecting infectious diseases caused by bacterial infectious agents
CC   e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC   infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC   Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus,
CC   Epstein-Barr virus and polio virus, and parasitic infectious agents
CC   selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus
CC   medinesis. The method is also useful for detecting genetic diseases such
CC   as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC   Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC   involved in DNA amplification, replication, recombination or repair, the
CC   cancer is specifically associated with a gene selected from BRCA1 gene,
CC   p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC   method is also used for environmental monitoring, forensics and the food
CC   and feed industry, detecting comprises scanning (using e.g. a scanning
CC   electron microscope and infrared microscope) the support at the
CC   particular sites and identifying if ligation of the oligonucleotide probe
CC   sets occurred and correlating (using a computer) identified ligation to a
CC   presence or absence of the target nucleotide sequences. ABI82074 to
CC   ABI97546 represent oligonucleotide sequences used in the exemplification
CC   of the present invention
XX
SQ   Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1121 TGCTTGGGTCCACGGACTA 1139
                |||||  ||||||  ||||  |
Db         19 TGCTTCGGTCCATGGACGA 1

RESULT 1045
ABQ87695
ID   ABQ87695 standard; DNA; 20 BP.
XX
AC   ABQ87695;
XX
DT   18-SEP-2002  (first entry)
XX
DE   Human ESR1 exon 1G reverse PCR primer.
XX
KW   Human; oestrogen; receptor; oestrogen receptor alpha; cytostatic;
KW   osteopathic; cardiant; cancer; osteoporosis; cardiovascular disorder;
KW   ESR-alpha; ESR1; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200234945-A2.
XX
PD   02-MAY-2002.
XX
PF   21-AUG-2001; 2001WO-US025990.
XX
PR   20-OCT-2000; 2000US-00692414.
PR   24-JAN-2001; 2001US-00768184.
PR   13-MAR-2001; 2001US-00804076.
PR   05-APR-2001; 2001US-00826314.
XX
PA   (APPL-) APPLERA CORP.
XX
PI   Kalush F,  Cassel MJ,  Hwang SS,  Winn_deen ES;
XX
DR   WPI; 2002-479722/51.
XX
PT   Peptide of estrogen receptor alpha genes variant or its fragment for use
PT   in identifying modulators for treating disorders e.g. a susceptibility to
PT   cancer, osteoporosis, cardiovascular disorder.
XX
PS   Example 1; Fig 2D; 352pp; English.
XX
CC   The invention relates to novel human oestrogen receptor variant peptides,
CC   and the polynucleotides encoding them. The peptides of the invention have
CC   cytostatic, osteopathic and cardiant activity. The peptides of the
CC   invention are useful to mediate or modulate a variety of disorders such
CC   as a susceptibility to cancer, osteoporosis, cardiovascular disorder,
CC   etc, and hence are useful in the treatment of the disorders. The
CC   sequences shown in ABQ87682-ABQ87719 represent PCR primers used in the
CC   invention to amplify individual exons of the human oestrogen receptor
CC   alpha (ESR-alpha or ESR1) gene
XX
SQ   Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        826 TCCCTCACCCTTGTCTTTG 844
                |||| || |||||||| |
Db          1 TCCCACAGCCTTGTCTTGG 19

RESULT 1046
ADG34600
ID   ADG34600 standard; DNA; 20 BP.
XX
AC   ADG34600;
XX
DT   26-FEB-2004  (first entry)
XX
DE   Phosphorothioate oligonucleotide calreticulin inhibitor SEQ ID NO:66.
XX
KW   ss; human; antisense compound; calreticulin; cytostatic; cardiant;
KW   virucide; osteopathic; antiparasitic; antisense gene therapy; melanoma;
KW   viral warts; rubella; schistosomiasis; congenital heart block;
KW   osteoporosis.
XX
OS   Synthetic.
XX
PN   WO200268688-A1.
XX
PD   06-SEP-2002.
XX
PF   30-OCT-2001; 2001WO-US048485.
XX
PR   22-FEB-2001; 2001US-00791406.
XX
PA   (ISIS-) ISIS PHARM INC.
PA   (BOEH ) BOEHRINGER INGELHEIM PHARM INC.
XX
PI   Bennett CF,  Rothlein R,  Kishimoto TK,  Cowsert LM;
XX
DR   WPI; 2002-750420/81.
XX
PT   New antisense compound that specifically hybridizes with and inhibits the
PT   expression of human calreticulin, useful for treating diseases e.g.
PT   osteoporosis or schistosomiasis.
XX
PS   Example 15; SEQ ID NO 66; 110pp; English.
XX
CC   The invention relates to a novel antisense compound, which is 8-10
CC   nucleotides in length targeted to a nucleic acid molecule encoding human
CC   calreticulin, and specifically hybridises with and inhibits the
CC   expression of human calreticulin. A compound of the invention has
CC   cytostatic, cardiant, virucide, osteopathic, and antiparasitic activity,
CC   and may act as a calreticulin-inhibitor, and have a use in antisense gene
CC   therapy. The antisense compound is useful for treating a disease or
CC   condition associated with calreticulin e.g. melanoma, viral warts,
CC   rubella, schistosomiasis, congenital heart block or osteoporosis.
CC   Further, it is useful as prophylaxis, research reagent and diagnostic.
CC   The present sequence is used in the exemplification of the invention. The
CC   sequence is a phosphorothioate oligonucleotide, having 2'-MOE wings and a
CC   deoxy gap.
```

```
XX
SQ   Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        928 CAGCTGCTCCGTGGCCTGG 946
              ||||| ||| |||||||||
Db          2 CAGCTCGTCCTTGGCCTGG 20


RESULT 1047
ADI17613
ID   ADI17613 standard; DNA; 20 BP.
XX
AC   ADI17613;
XX
DT   15-APR-2004  (first entry)
XX
DE   Reverse PCR primer used to amplify human NOVX DNA SeqID1149.
XX
KW   PCR; ss; NOVX; metabolic disorder; diabetes; anorexia; cancer;
KW   cardiovascular; infectious; neurodegenerative; immune;
KW   haematopoietic disease; dyslipidaemia; anorectic; virucide; nootropic;
KW   antiinflammatory; neuroprotective; antilipaemic; anabolic; cardiant;
KW   neurogenesis; wound healing; angiogenesis; chromosome mapping;
KW   tissue typing; preventive medicine; pharmacogenomic; primer; human.
XX
OS   Homo sapiens.
XX
PN   WO200268649-A2.
XX
PD   06-SEP-2002.
XX
PF   31-JAN-2002; 2002WO-US002785.
XX
PR   31-JAN-2001; 2001US-0265395P.
PR   31-JAN-2001; 2001US-0265412P.
PR   31-JAN-2001; 2001US-0265514P.
PR   31-JAN-2001; 2001US-0265517P.
PR   02-FEB-2001; 2001US-0266406P.
PR   05-FEB-2001; 2001US-0266767P.
PR   07-FEB-2001; 2001US-0266975P.
PR   07-FEB-2001; 2001US-0267057P.
PR   08-FEB-2001; 2001US-0267459P.
PR   09-FEB-2001; 2001US-0267823P.
PR   15-FEB-2001; 2001US-0268974P.
PR   26-FEB-2001; 2001US-0271664P.
PR   27-FEB-2001; 2001US-0271839P.
PR   27-FEB-2001; 2001US-0271855P.
PR   02-MAR-2001; 2001US-0272788P.
PR   02-MAR-2001; 2001US-0273046P.
PR   14-MAR-2001; 2001US-0275925P.
PR   14-MAR-2001; 2001US-0275947P.
PR   14-MAR-2001; 2001US-0275950P.
PR   14-MAR-2001; 2001US-0275989P.
PR   15-MAR-2001; 2001US-0276448P.
PR   15-MAR-2001; 2001US-0276450P.
PR   16-MAR-2001; 2001US-0276397P.
PR   16-MAR-2001; 2001US-0276768P.
PR   20-MAR-2001; 2001US-0278652P.
PR   26-MAR-2001; 2001US-0278775P.
PR   26-MAR-2001; 2001US-0278778P.
PR   29-MAR-2001; 2001US-0279882P.
PR   29-MAR-2001; 2001US-0279884P.
PR   30-MAR-2001; 2001US-0280147P.
PR   11-APR-2001; 2001US-0282992P.
PR   11-APR-2001; 2001US-0283083P.
PR   20-APR-2001; 2001US-0285133P.
PR   23-APR-2001; 2001US-0285749P.
PR   03-MAY-2001; 2001US-0288327P.
PR   03-MAY-2001; 2001US-0288504P.
PR   29-MAY-2001; 2001US-0294047P.
PR   30-MAY-2001; 2001US-0294473P.
PR   08-JUN-2001; 2001US-0296964P.
PR   18-JUN-2001; 2001US-0298959P.
PR   19-JUN-2001; 2001US-0299324P.
PR   13-AUG-2001; 2001US-0312020P.
PR   16-AUG-2001; 2001US-0312889P.
PR   16-AUG-2001; 2001US-0312908P.
PR   21-AUG-2001; 2001US-0313390P.
PR   28-AUG-2001; 2001US-0315470P.
PR   31-AUG-2001; 2001US-0316447P.
PR   07-SEP-2001; 2001US-0318115P.
PR   07-SEP-2001; 2001US-0318118P.
PR   12-SEP-2001; 2001US-0318740P.
PR   19-SEP-2001; 2001US-0323379P.
PR   18-OCT-2001; 2001US-0330245P.
PR   18-OCT-2001; 2001US-0330308P.
PR   14-NOV-2001; 2001US-0332701P.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Tchernev VT,  Spytek KA,  Zerhusen BD,  Patturajan M,  Shimkets RA;
PI   Li L,  Gangolli EA,  Padigaru M,  Anderson DW,  Rastelli L,  Miller CE;
PI   Gerlach VL,  Taupier RJ,  Gusev VY,  Colman SD,  Wolenc AR,  Pena CEA;
PI   Furtak K,  Grosse WM,  Alsobrook JP,  Lepley DM,  Rieger DK,  Burgess CE;
XX
DR   WPI; 2002-706998/76.
XX
PT   New NOVX polypeptides and nucleic acids, useful for preventing or
PT   treating NOVX-associated disorders, e.g. cancer, cardiomyopathy,
PT   atherosclerosis, or diabetes, and in chromosome mapping, tissue typing or
PT   pharmacogenomics.
XX
PS   Example 2; SEQ ID NO 1149; 1498pp; English.
XX
CC   This invention relates to a novel nucleic acids, and encoded polypeptides
CC   thereof, which have properties related to the stimulation of biochemical
CC   or physiological responses in a cell, tissue, organ or organism.
CC   Specifically, it refers to the use of biologically active fragments for
CC   diagnostic and prognostic assays and furthermore in the treatment of
CC   diverse pathological conditions. The present invention describes novel
CC   human and murine NOVX proteins, as well as methods to modulate their
CC   expression using antisense oligos, ribozymes and peptide nucleic acids.
CC   The polypeptides, nucleic acid molecules and antibodies are useful in the
CC   manufacture of a medicament for treating metabolic disorders, diabetes,
CC   anorexia, cancer, cardiovascular, infectious, neurodegenerative, immune
CC   and haematopoietic diseases as well as various dyslipidaemias.
CC   Accordingly, these molecules have many activities including anorectic,
CC   virucide, nootropic, antiinflammatory, neuroprotective, antilipaemic,
CC   anabolic and cardiant. Furthermore, they are useful in screening assays
CC   to identify small molecules that modulate or inhibit, for example,
CC   neurogenesis, wound healing and angiogenesis. The nucleic acids are also
CC   used as in chromosome mapping, tissue typing, preventive medicine and
CC   pharmacogenomics. This oligonucleotide is a PCR primer used to amplify
CC   human NOVX DNA of the invention.
XX
SQ   Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        506 AGGGCTACCTGGAGAAGCT 524
              ||| | | ||||||||||||
Db          2 AGGACCATCTGGAGAAGCT 20


RESULT 1048
ADA44788
ID   ADA44788 standard; DNA; 20 BP.
XX
AC   ADA44788;
XX
```

```
DT   20-NOV-2003  (first entry)
XX
DE   Antisense oligonucleotide  #ISIS 115460 #SEQ ID 86.
XX
KW   Antisense oligonucleotide; cytostatic; immunosuppressive;
KW   antiinflammatory; gene therapy; hyperproliferative disorder; cancer;
KW   autoimmune; inflammatory disorder; inhibitor-kappa B kinase-gamma; ss;
KW   human.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages, all cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003031576-A2.
XX
PD   17-APR-2003.
XX
PF   03-OCT-2002; 2002WO-US031809.
XX
PR   06-OCT-2001; 2001US-00972607.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Wyatt JR;
XX
DR   WPI; 2003-457242/43.
XX
PT   New compound having sequence targeted to nucleic acid encoding inhibitor-
PT   kappa B kinase-gamma, useful for preparing composition for treating e.g.,
PT   cancer, or inflammatory or autoimmune disorder.
XX
PS   Claim 3; Page 78; 106pp; English.
XX
CC   The invention relates to an antisense compound that is targeted to a
CC   nucleic acid encoding inhibitor-kappa B kinase-gamma, specifically
CC   hybridising to the nucleic acid encoding inhibitor-kappa B kinase-gamma
CC   and inhibiting its expression. Compounds of the invention are antisense
CC   oligonucleotides comprising at least one modified internucleoside
CC   linkage, which is a phosphorothioate linkage, at least one modified sugar
CC   moiety, which is a 2'-O-methoxyethyl sugar moiety, or at least one
CC   modified nucleobase, which is a 5-methylcytosine. Preferably, the
CC   antisense oligonucleotide is a chimeric oligonucleotide. The compound of
CC   the invention is useful for preparing a composition for treating a
CC   hyperproliferative disorder e.g., cancer, or an autoimmune or
CC   inflammatory disorder. The methods are useful for inhibiting the
CC   expression of inhibitor-kappa B kinase-gamma in cells or tissues, and
CC   treating an animal having a disease or condition associated with
CC   inhibitor-kappa B kinase-gamma. Sequences given in ADA44713-ADA44790
CC   represent antisense oligonucleotides for the inhibition of human
CC   inhibitor-kappa B kinase-gamma mRNA levels.
XX
SQ   Sequence 20 BP; 3 A; 8 C; 8 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         78 AGGGCCCCGCGGCTCTGAG 96
              |||||||||  |||| |||
Db          1 AGGGCCCCGGCGCTCCGAG 19
```

```
RESULT 1049
ABT34198/c
ID   ABT34198 standard; DNA; 20 BP.
XX
AC   ABT34198;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Mouse short heterodimer partner-1 expression oligo SEQ ID No 73.
XX
KW   Antiarteriosclerotic; cardiant; vasotropic; antiinfective; cytostatic;
KW   antiinflammatory; inhibitor; antisense gene therapy; atherosclerosis;
KW   short heterodimer partner-1; abnormal; lipid; cholesterol metabolism;
KW   cardiovascular disease; infection; inflammation; tumour formation; mouse;
KW   antisense; ds.
XX
OS   Unidentified.
XX
PN   WO2003012033-A2.
XX
PD   13-FEB-2003.
XX
PF   17-JUL-2002; 2002WO-US023245.
XX
PR   31-JUL-2001; 2001US-00919197.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke RM,  Graham MJ;
XX
DR   WPI; 2003-248161/24.
XX
PT   New antisense oligonucleotide targeted to a nucleic acid encoding short
PT   heterodimer partner-1, useful for treating diseases involving abnormal
PT   lipid or cholesterol metabolism, e.g atherosclerosis or cardiovascular
PT   diseases.
XX
PS   Claim 3; Page 95; 121pp; English.
XX
CC   The invention relates to a novel compound of 8 - 50 nucleobases in length
CC   targeted to a nucleic acid molecule encoding a short heterodimer partner-
CC   1. The novel compound specifically hybridizes with a nucleic acid
CC   molecule encoding the short heterodimer partner-1, and inhibits the
CC   expression of the nucleic acid molecule. The compound, and a composition
CC   comprising it are useful for treating a disease or condition associated
CC   with the short heterodimer partner-1, particularly a condition involving
CC   abnormal lipid or cholesterol metabolism such as atherosclerosis or a
CC   cardiovascular disease. They are also useful in research and diagnostics
CC   for modulating the expression of short heterodimer partner-1. They can
CC   also be useful prophylactically in preventing or delaying infection,
CC   inflammation or tumour formation. This polynucleotide sequence represents
CC   a mouse antisense oligo relating to the heterodimer partner-1 of the
CC   invention
XX
SQ   Sequence 20 BP; 9 A; 4 C; 7 G; 0 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1111 CCTGACATCCTGCTTGGGT 1129
              |||  | ||||||||||||
Db         20 CCTCTCTTCCTGCTTGGGT 2


RESULT 1050
ACC49703/c
ID   ACC49703 standard; DNA; 20 BP.
XX
AC   ACC49703;
XX
```

```
DT   01-JUL-2003  (first entry)
XX
DE   Human KSR chimeric phosphorothioate oligonucleotide SEQ ID NO:73.
XX
KW   Human; kinase suppressor of ras-1; KSR; cytostatic; KSR inhibitor;
KW   antisense gene therapy; hyperproliferative disorder; phosphorothioate;
KW   developmental disorder; antisense oligonucleotide; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate backbone"
FT   modified_base   1. .5
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methoxyethyls (2'-MOE)"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methoxyethyls (2'-MOE)"
XX
PN   WO2003025144-A2.
XX
PD   27-MAR-2003.
XX
PF   19-SEP-2002; 2002WO-US029705.
XX
PR   20-SEP-2001; 2001US-00961001.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Freier SM;
XX
DR   WPI; 2003-363140/34.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding KSR, useful for treating a disease/condition
PT   associated with KSR, such as hyperproliferative or developmental
PT   disorders.
XX
PS   Example 15; Page 75; 102pp; English.
XX
CC   The present invention describes a compound 8-50 nucleobases in length
CC   targeted to, and which specifically hybridises with a nucleic acid
CC   molecule encoding kinase suppressor of ras-1 (KSR), and inhibits the
CC   expression of KSR. Also described: (1) a compound 8-50 nucleobases in
CC   length that specifically hybridises with at least an 8-nucleobase portion
CC   of an active site on a nucleic acid molecule encoding KSR; (2) a
CC   composition comprising the compound and a carrier or diluent; (3)
CC   inhibiting the expression of KSR in cells or tissues by contacting the
CC   cells or tissues with the compound so that expression of KSR is inhibited
CC   ; and (4) treating an animal having a disease or condition associated
CC   with KSR by administering to the animal a therapeutic or prophylactic
CC   amount of the compound so that expression of KSR is inhibited. The
CC   compound has cytostatic activity and can be used as a KSR inhibitor, and
CC   in antisense gene therapy. The compound, composition and methods are
CC   useful for treating a disease or condition associated with KSR, such as a
CC   hyperproliferative or developmental disorder, or a disease or condition
CC   arising from aberrant apoptosis by inhibiting the expression of KSR. They
CC   are also useful in research and diagnostics for modulating the expression
CC   of KSR. The present sequence represents a chimeric phosphorothioate
CC   antisense oligonucleotide of human KSR, which is used in an example from
CC   the present invention
XX
SQ   Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       366 GAGTGACCAGGCTTCAGCC 384
             ||| |||| |||||||||
Db        19 GAGAGACCCAGCTTCAGCC 1


RESULT 1051
ACC50005/c
ID   ACC50005 standard; DNA; 20 BP.
XX
AC   ACC50005;
XX
DT   14-JUL-2003  (first entry)
XX
DE   Oligonucleotide primer ITS3.
XX
KW   Mitochondria; fungal pathogen; PCR; primer; ss.
XX
OS   Synthetic.
XX
PN   WO2003027635-A2.
XX
PD   03-APR-2003.
XX
PF   19-SEP-2002; 2002WO-US030311.
XX
PR   24-SEP-2001; 2001US-00961755.
XX
PA   (SYGN ) SYNGENTA PARTICIPATIONS AG.
XX
PI   Beck JJ,  Barnett CJ;
XX
DR   WPI; 2003-363229/34.
XX
PT   Detecting a fungal pathogen, useful for monitoring disease development,
PT   comprises subjecting the DNA to PCR amplification using at least one
PT   primer having sequence identity with at least 10 contiguous nucleotides
PT   of Fusarium spp.
XX
PS   Claim 6; Page 17; 44pp; English.
XX
CC   This invention relates to the detection of a fungal pathogen comprising
CC   isolating DNA from a plant leaf infected with a pathogen. The methods and
CC   primers are useful for identifying fungal isolates of fungal pathogens
CC   and monitoring of disease development in plant populations. The present
CC   sequence represents an oligonucleotide primer used to detect Fusarium ear
CC   rot pathogens
XX
SQ   Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy      1549 CTTCGGTCTTCGTCGATGC 1567
             || || ||||| |||||||
Db        19 CTGCGTTCTTCATCGATGC 1


RESULT 1052
ACC50004
ID   ACC50004 standard; DNA; 20 BP.
XX
AC   ACC50004;
XX
DT   14-JUL-2003  (first entry)
XX
DE   Oligonucleotide primer ITS2.
XX
KW   Mitochondria; fungal pathogen; PCR; primer; ss.
XX
OS   Synthetic.
XX
```

PN WO2003027635-A2.
XX
PD 03-APR-2003.
XX
PF 19-SEP-2002; 2002WO-US030311.
XX
PR 24-SEP-2001; 2001US-00961755.
XX
PA (SYGN) SYNGENTA PARTICIPATIONS AG.
XX
PI Beck JJ, Barnett CJ;
XX
DR WPI; 2003-363229/34.
XX
PT Detecting a fungal pathogen, useful for monitoring disease development,
PT comprises subjecting the DNA to PCR amplification using at least one
PT primer having sequence identity with at least 10 contiguous nucleotides
PT of Fusarium spp.
XX
PS Claim 6; Page 17; 44pp; English.
XX
CC This invention relates to the detection of a fungal pathogen comprising
CC isolating DNA from a plant leaf infected with a pathogen. The methods and
CC primers are useful for identifying fungal isolates of fungal pathogens
CC and monitoring of disease development in plant populations. The present
CC sequence represents an oligonucleotide primer used to detect Fusarium ear
CC rot pathogens
XX
SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1549 CTTCGGTCTTCGTCGATGC 1567
|| || ||||| |||||||
Db 2 CTGCGTTCTTCATCGATGC 20

RESULT 1053
ABV99905
ID ABV99905 standard; DNA; 20 BP.
XX
AC ABV99905;
XX
DT 21-FEB-2003 (first entry)
XX
DE Streptococcus thermophilus plasmid pMT1-related PCR primer #7.
XX
KW Plasmid pMT1; food; food additive; research reagent; drug; PCR; primer;
KW ss.
XX
OS Streptococcus thermophilus.
XX
PN JP2002253260-A.
XX
PD 10-SEP-2002.
XX
PF 02-MAR-2001; 2001JP-00059196.
XX
PR 02-MAR-2001; 2001JP-00059196.
XX
PA (MEIP) MEIJI MILK PROD CO LTD.
XX
DR WPI; 2003-096538/09.
XX
PT A new plasmid of Streptococcus thermophilus and its derivatives, used to
PT make a transformant, a food, a food additive, a feed, a research reagent,
PT and a drug.
XX
PS Example 3; Page 19; 25pp; Japanese.
XX
CC The present invention relates to plasmid pMT1 derived from Streptococcus
CC thermophilus (ABV99898). The plasmid is useful for making a transformant
CC which is used for the preparation of foods, food additives, feeds,
CC research reagents or drugs. The present sequence is a PCR primer, which
CC was used in an example from the invention
XX
SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 208 GAGCAGATAGGCCTGGATG 226
||||| |||| |||||| |
Db 1 GAGCATATAGCCCTGGAAG 19

RESULT 1054
ABZ59526/c
ID ABZ59526 standard; DNA; 20 BP.
XX
AC ABZ59526;
XX
DT 17-APR-2003 (first entry)
XX
DE Mouse src-c chimeric phosphorothioate oligonucleotide SEQ ID NO:147.
XX
KW Mouse; src-c; tyrosine kinase; src-c inhibitor; cytostatic; osteopathic;
KW antiinflammatory; antibacterial; antisense therapy; vaccine; cancer;
KW antisense oligonucleotide; aberrant bone remodeling; breast cancer;
KW hyperproliferative disorder; pancreatic cancer; lung cancer; tumour;
KW ovarian cancer; oesophageal cancer; neuroblastoma; retinoblastoma;
KW Kaposi's sarcoma; infection; inflammation; tumour formation;
KW phosphorothioate; ss.
XX
OS Mus musculus.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages"
FT modified_base 1. .5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl gapmer (2'-MOE wing)"
FT modified_base 16. .20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl gapmer (2'-MOE wing)"
XX
PN WO200295053-A2.
XX
PD 28-NOV-2002.
XX
PF 16-MAY-2002; 2002WO-US015684.
XX
PR 18-MAY-2001; 2001US-00860473.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett FC, Watt AT;
XX
DR WPI; 2003-120806/11.
XX
PT New antisense oligonucleotides targeted to nucleic acids encoding src-c,
PT useful for diagnosing, treating or preventing diseases associated with
PT the expression of src-c, e.g. cancer or inflammation, and in research
PT applications.
XX
PS Claim 3; Page 92; 137pp; English.
XX
CC The present invention describes a compound (I) that is 8-50 nucleobases

```
CC   in length targeted to a nucleic acid molecule encoding a 5'UTR, 3'UTR,
CC   coding region, intron region, exon region, stop codon, intron:exon
CC   junction, exon:exon junction, or 5' mRNA variant of src-c, and which
CC   specifically hybridises with and inhibits the expression of src-c. (I)
CC   have cytostatic, antiinflammatory, osteopathic and antibacterial
CC   activities, and can be used in antisense therapy and in vaccines. The
CC   antisense compounds (I) can be used for modulating the expression of src-
CC   c and for treating diseases or conditions associated with expression of
CC   src-c, e.g. aberrant bone remodeling or hyperproliferative disorders,
CC   particularly cancer, such as breast cancer, pancreatic cancer, lung
CC   cancer, ovarian cancer, oesophageal cancer, neuroblastoma, retinoblastoma
CC   or Kaposi's sarcoma. (I) are also useful for diagnostics, therapeutics,
CC   prophylaxis, e.g. to prevent or delay infection, inflammation or tumour
CC   formation, as research reagents and kits, and in distinguishing between
CC   functions of various members of a biological pathway. The present
CC   sequence represents a mouse src-c antisense chimeric phosphorothioate
CC   oligonucleotide, which is used in an example from the present invention
XX
SQ   Sequence 20 BP; 2 A; 5 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1610 TCTAAGCCACAGACCGAGG 1628
              || ||||| |||||| |||
Db         20 TCCAAGCCTCAGACCCAGG 2


RESULT 1055
ADA26668/c
ID   ADA26668 standard; DNA; 20 BP.
XX
AC   ADA26668;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Rat Jun N-terminal kinase, JNK1, antisense oligonucleotide ISIS21867.
XX
KW   ss; rat; Jun N-terminal kinase; JNK1; JNK2; JNK3; antisense; cytostatic;
KW   antiinflammatory; apoptosis; prostate cancer; prostate tumour;
KW   inflammation; fibrosis; fibrotic disease; fibrotic scarring;
KW   peritoneal adhesion; lung fibrosis; conjunctival scarring;
KW   hyperproliferative disease; cancer; probe.
XX
OS   Rattus norvegicus.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "All cytosines are 5-methyl-cytosines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethoxy-modified and phosphorothioate
FT                   linkages"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethoxy-modified and phosphorothioate
FT                   linkages"
XX
PN   US2003004120-A1.
XX
PD   02-JAN-2003.
XX
PF   31-JAN-2001; 2001US-00774809.
XX
PR   13-AUG-1997;   97US-00910629.
PR   07-AUG-1998;   98US-00130616.
PR   07-APR-1999;   99US-00287796.
PR   15-SEP-1999;   99US-00396902.
XX
PA   (MCKA/) MCKAY R.
PA   (DEAN/) DEAN N M.
PA   (MONI/) MONIA B P.
PA   (NERO/) NERO P.
PA   (GAAR/) GAARDE W A.
XX
PI   Mckay R,  Dean NM,  Monia BP,  Nero P,  Gaarde WA;
XX
DR   WPI; 2003-311908/30.
XX
PT   New oligonucleotides which hybridizes to, and modulates the expression of
PT   Jun N-terminal kinase, useful for treating a disease or condition
PT   characterized by a reduction in apoptosis, e.g. prostate cancer,
PT   inflammation or fibrosis.
XX
PS   Example 7; Page 33; 69pp; English.
XX
CC   The invention relates to an oligonucleotide (antisense, AS) comprising 8-
CC   30 nucleotides connected by covalent linkages, where the oligonucleotide
CC   has a sequence specifically hybridisable with a nucleic acid encoding a
CC   Jun N-terminal kinase (JNK) protein and modulates the expression of the
CC   JNK protein. Also included are a pharmaceutical composition comprising
CC   the AS oligonucleotide (or its bioequivalent, and a pharmaceutical
CC   carrier), treating an animal having/suspected of having/prone to having a
CC   hyperproliferative disease (by administering to a prophylactic or
CC   therapeutic amount of the composition of the AS oligonucleotide),
CC   modulating the expression of a JNK protein in cells or tissues by
CC   contacting the cells or tissues with the AS oligonucleotide, modulating
CC   the cell cycle progression (or the phosphorylation of a protein
CC   phosphorylated by a JNK protein, or expression of a cellular protein that
CC   promotes one or more metastatic events in cultured cells or the cells of
CC   an animal) by administering the oligonucleotide to the cells, inhibiting
CC   the growth of a tumour in an animal by administering the oligonucleotide,
CC   inducing apoptosis in a cell by contacting a cell with an AS
CC   oligonucleotide for JNK2 and treating a human having a disease or
CC   condition associated with a JNK protein or characterised by a reduction
CC   in apoptosis by administering a prophylactic or therapeutic amount of the
CC   AS oligonucleotide. The antisense oligonucleotide is useful for treating
CC   a disease or condition characterised by a reduction in apoptosis, such as
CC   prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic
CC   disease or condition (e.g. fibrotic scarring, peritoneal adhesions, lung
CC   fibrosis or conjunctival scarring), hyperproliferative disease or
CC   condition, such as cancer. The antisense oligonucleotides may also be
CC   used as research agents and diagnostic aids, to detect the presence of
CC   JNK protein-specific nucleic acids in a cell or tissue sample, and to
CC   study the function of one or more genes in the animal. The present
CC   sequence is an antisense oligonucleotide targeting a rat JNK sequence.
XX
SQ   Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1424 GGATCTCCGCAGAGGATGC 1442
              ||||||||| ||| || ||
Db         20 GGATCTCCGTAGACGAAGC 2


RESULT 1056
AAD52299
ID   AAD52299 standard; DNA; 20 BP.
XX
AC   AAD52299;
XX
DT   02-MAY-2003  (first entry)
XX
DE   Human IFNGR2 antisense oligonucleotide, ISIS #142777.
XX
KW   Antisense; interferon gamma receptor 2; autoimmune disorder; cancer;
KW   autoimmune thyroiditis; autoimmune insulinitis; multiple sclerosis;
KW   diabetes; autoimmune arthritis; Crohn's disease; apoptosis; IFNGR2;
```

```
KW   gene therapy; prophylaxis; human; phosphorothioate; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidine residues
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotides"
XX
PN   WO200288163-A1.
XX
PD   07-NOV-2002.
XX
PF   16-APR-2002; 2002WO-US012007.
XX
PR   26-APR-2001; 2001US-00843377.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Watt AT;
XX
DR   WPI; 2003-156688/15.
XX
PT   New antisense oligonucleotides for modulating Interferon gamma receptor
PT   2, particularly useful for treating autoimmune disorders (e.g. multiple
PT   sclerosis or Crohn's disease), cancers or diseases caused by aberrant
PT   apoptosis.
XX
PS   Claim 3; Page 85; 127pp; English.
XX
CC   The invention relates to antisense compounds, composition and methods for
CC   modulating the expression of human interferon gamma receptor 2 (IFNGR2).
CC   The compositions comprise antisense compounds targetted to nucleic acids
CC   encoding IFNGR2. Antisense compounds of the invention are useful for
CC   treating diseases or conditions associated with IFNGR2, e.g. autoimmune
CC   disorder (e.g. autoimmune thyroiditis, diabetes, multiple sclerosis,
CC   autoimmune arthritis, autoimmune insulinitis or Crohn's disease), cancer,
CC   or a disease/disorder caused by aberrant apoptosis. They are also useful
CC   for diagnostics, therapeutics, prophylaxis or as research reagents or
CC   kits. The invention is useful in gene therapy. The present sequence is an
CC   antisense oligonucleotide targetted to human IFNGR2 DNA
XX
SQ   Sequence 20 BP; 4 A; 3 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         62 TGCTGAAACCCAGGGGAGG 80
              ||||||| | ||| |||||
Db          2 TGCTGAAGCTCAGTGGAGG 20


RESULT 1057
AAD55498/c
ID   AAD55498 standard; DNA; 20 BP.
XX
AC   AAD55498;
XX
DT   07-AUG-2003  (first entry)
XX
DE   Human FGFR-3 antisense oligonucleotide, ISIS #125204.
XX
KW   Human; antisense; fibroblast growth factor receptor 3; prophylaxis;
KW   developmental disorder; hyperproliferative disorder; antisense therapy;
KW   FGFR-3; ACH; JTK4; CEK2; cancer; phosphorothioate; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone; All cytidine residues
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2 -methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003023004-A2.
XX
PD   20-MAR-2003.
XX
PF   06-SEP-2002; 2002WO-US028549.
XX
PR   10-SEP-2001; 2001US-00953047.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Wyatt JR;
XX
DR   WPI; 2003-313244/30.
XX
PT   Novel compound targeted to a nucleic acid molecule encoding fibroblast
PT   growth factor receptor 3, useful for inhibiting the expression of the
PT   receptor and for treating an animal having cancer or developmental
PT   disorder.
XX
PS   Claim 3; Page 79; 120pp; English.
XX
CC   The invention relates to antisense compounds targetted to a nucleic acid
CC   molecule encoding fibroblast growth factor (FGF) receptor 3 (also known
CC   as FGFR-3, ACH, JTK4 and CEK2) to inhibit its expression. Antisense
CC   compounds of the invention are useful for treating diseases or conditions
CC   associated with FGFR-3 such as developmental disorders or
CC   hyperproliferative disorders, especially cancer of colorectal, bladder,
CC   bone, lung, cervical, breast or skin. They are useful as research
CC   reagents, therapeutics, prophylaxis, kits and diagnostics, and as tools
CC   in differential and/or combinatorial analyses to elucidate expression
CC   patterns of a portion of the genes expressed within cells and tissues.
CC   They are also useful in antisense therapy. The present sequence is an
CC   antisense oligonucleotide targetted to human FGFR-3
XX
SQ   Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        335 ACGAGGACTTGAAGATGGG 353
              ||| | || ||||||||||
Db         20 ACGGGTACCTGAAGATGGG 2


RESULT 1058
AAL55617/c
ID   AAL55617 standard; DNA; 20 BP.
XX
AC   AAL55617;
```

```
XX
DT   29-JUL-2003  (first entry)
XX
DE   Fungal universal ITS3 PCR primer - used to amplify ITS2 region DNA.
XX
KW   Fungal; ITS3; interspace 3 region; ss; fermentation process; lovastatin;
KW   exocellular pravastatin production; statin; HMG-CoA; primer; PCR;
KW   cholesterol synthesis; cholesterol-lowering drug;
KW   hydroxy-methylglutaryl coenzyme A reductase.
XX
OS   Fungi sp.
XX
PN   EP1266967-A1.
XX
PD   18-DEC-2002.
XX
PF   15-JUN-2001; 2001EP-00114462.
XX
PR   15-JUN-2001; 2001EP-00114462.
XX
PA   (GNOS-) GNOSIS SRL.
XX
PI   Benedetti A,  Manzoni M,  Nichele M,  Rollini M;
XX
DR   WPI; 2003-423103/40.
XX
PT   Fermentation useful for producing pravastatin involves pre-fermenting
PT   fungal strain in first nutrient medium, and then fermenting strain in
PT   second nutrient medium.
XX
PS   Disclosure; Page 10; 15pp; English.
XX
CC   The invention relates to a novel fermentation process to be used in the
CC   production of exocellular pravastatin and lovastatin which comprises
CC   cultivating microorganisms from Aspergillus and Monascus species. Statins
CC   are fungal secondary metabolites which inhibit hydroxy-methylglutaryl
CC   coenzyme A (HMG-CoA) reductase, the first committed enzyme of cholesterol
CC   synthesis. Statins are therefore used as cholesterol-lowering drugs. The
CC   fermentation process facilitates the production of extracellular
CC   pravastatin, either in a cell-associated form or releasable into the
CC   culture broth, directly, as a secondary metabolite, in the fermentation
CC   culture medium. Those production processes currently in existence
CC   generate relatively low yields. In contrast, the process of the invention
CC   produces relatively high yields of pravastatin i.e. at least 500 mg/l
CC   using Aspergillus terreus and a very high yield i.e. 1 - 4 g/l using
CC   Monascus ruber. In addition, the process uses simple and complex carbon
CC   sources obtained from agricultural waste thereby reducing production
CC   costs. The current sequence is that of the fungal universal ITS3 PCR
CC   primer of the invention which was used to amplify the Aspergillus terreus
CC   (DSM 13596) ITS2 region DNA
XX
SQ   Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1549 CTTCGGTCTTCGTCGATGC 1567
             || || ||||| |||||||
Db         19 CTGCGTTCTTCATCGATGC 1

RESULT 1059
ABX33731
ID   ABX33731 standard; DNA; 20 BP.
XX
AC   ABX33731;
XX
DT   10-FEB-2003  (first entry)
XX
DE   PCR primer #14 for human oestrogen receptor alpha (ESR1) gene.
XX
KW   Human; oestrogen receptor alpha; ESR1; cancer; osteoporosis;
KW   cardiovascular disorder; variant oestrogen receptor; ESR1 haplotype;
KW   ESR1 polymorphism detection; cytostatic; osteopathic; cardiant; PCR;
KW   primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002123095-A1.
XX
PD   05-SEP-2002.
XX
PF   21-AUG-2001; 2001US-00933267.
XX
PR   20-OCT-1999;   99US-0160626P.
PR   22-FEB-2000; 2000US-0183756P.
PR   20-OCT-2000; 2000US-00692414.
PR   24-JAN-2001; 2001US-00768184.
PR   13-MAR-2001; 2001US-00804076.
PR   05-APR-2001; 2001US-00826314.
XX
PA   (PEKE ) PE CORP NY.
XX
PI   Kalush F,  Cassel MJ,  Hwang SS,  Winn-Deen ES;
XX
DR   WPI; 2003-066793/06.
XX
PT   Novel isolated estrogen receptor alpha variant peptide, useful in
PT   development of diagnostics and therapies for diseases or disorders
PT   mediated/modulated by the estrogen receptor, or as immunogens to raise
PT   antibodies.
XX
PS   Claim 1; Fig 2d; 186pp; English.
XX
CC   The present invention relates to the sequencing of genomic DNA encoding
CC   human oestrogen receptor alpha (ESR1) protein. The gene encoding human
CC   ESR1 is located on chromosome 6. The invention provides the genomic
CC   structure of the ESR1 gene and novel single nucleotide polymorphisms
CC   (SNPs)/haplotypes in the genes. The polymorphisms/haplotypes can lead to
CC   a variety of disorders (such as cancer, osteoporosis, and cardiovascular
CC   disorders) that are mediated by a variant oestrogen receptor. The
CC   invention provides methods of detecting ESR1 polymorphisms/haplotypes in
CC   a sample, methods of determining a risk of having or developing a
CC   disorder mediated by a variant oestrogen receptor and methods for
CC   screening compounds useful for treating such disorders. ABX33718-ABX33755
CC   represent PCR primers for the human ESR1 gene
XX
SQ   Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        826 TCCCTCACCCTTGTCTTTG 844
              |||| || |||||||| |
Db          1 TCCCACAGCCTTGTCTTGG 19

RESULT 1060
ACC47147/c
ID   ACC47147 standard; DNA; 20 BP.
XX
AC   ACC47147;
XX
DT   23-JUN-2003  (first entry)
XX
DE   Nucleotide sequence of 5'-biotin-labeled universal capture probe ITS3-B.
XX
KW   Dimorphic fungus; internal transcribed spacer-2; ITS2; fungal infection;
KW   probe; ss.
XX
OS   Synthetic.
XX
PN   WO2003027329-A1.
XX
```

```
PD   03-APR-2003.
XX
PF   25-SEP-2002; 2002WO-US030605.
XX
PR   26-SEP-2001; 2001US-0325241P.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Lindsley MD, Qin Z, Choi JS, Morrison CJ;
XX
DR   WPI; 2003-354661/33.
XX
PT   Detecting a dimorphic fungus, useful for diagnosing fungal infections,
PT   comprises detecting the presence or absence of an internal transcribed
PT   spacer-2 (ITS2) nucleic acid sequence of a dimorphic fungus within a
PT   sample.
XX
PS   Claim 5; Page 35; 71pp; English.
XX
CC   The invention relates to detecting a dimorphic fungus. The method
CC   involves detecting the presence or absence of an internal transcribed
CC   spacer-2 (ITS2) nucleic acid sequence of a dimorphic fungus within a
CC   sample, where the presence of the ITS2 nucleic acid sequence indicates
CC   the sample was contacted by the dimorphic fungus. The method is useful
CC   for detecting or diagnosing fungal infections. The array is useful for
CC   screening a sample for the presence of, or contamination by a dimorphic
CC   fungus. The present sequence represents a 5'-biotin-labeled universal
CC   capture probe, used for detecting a dimorphic fungus
XX
SQ   Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1549 CTTCGGTCTTCGTCGATGC 1567
                || || ||||| |||||||
Db         19 CTGCGTTCTTCATCGATGC 1

RESULT 1061
AAL62456/c
ID   AAL62456 standard; DNA; 20 BP.
XX
AC   AAL62456;
XX
DT   06-OCT-2003  (first entry)
XX
DE   Human ABC transporter MHC I antisense oligonucleotide, ISIS 206637.
XX
KW   ABC transporter; ABCT; major histocompatibility complex; MHC; cytostatic;
KW   hyperproliferative; autoimmune disorder; antisense gene therapy;
KW   inflammation; tumour formation; immunosuppressive; antimicrobial; human;
KW   phosphorothioate backbone; antisense; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidines are 5-
FT                    methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
XX
PN   WO2003051309-A2.
XX
PD   26-JUN-2003.
XX
PF   12-DEC-2002; 2002WO-US040101.
XX
PR   17-DEC-2001; 2001US-00024369.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Borchers AH, Ward DT, Freier SM;
XX
DR   WPI; 2003-577305/54.
XX
PT   New antisense compound that hybridizes and inhibits the nucleic acid
PT   encoding ABC transporter major histocompatibility complex 1, for treating
PT   diseases or conditions such as a hyperproliferative or autoimmune
PT   disorder.
XX
PS   Claim 3; Page 81; 112pp; English.
XX
CC   The invention relates to a compound targetted to a nucleic acid molecule
CC   encoding ABC transporter (ABCT) major histocompatibility complex (MHC) 1
CC   where the compound specifically hybridises with the nucleic acid molecule
CC   and inhibits expression of ATM or specifically hybridises with at least a
CC   portion of an active site on the nucleic acid molecule. The invention is
CC   useful for inhibiting the expression of ATM in cells or tissues. The
CC   invention is useful for treating an animal with hyperproliferative or
CC   autoimmune disorder. The invention is useful for diagnostics,
CC   therapeutics, prophylaxis, as research reagents and kits, for
CC   distinguishing functions of various members of a biological pathway and
CC   in antisense gene therapy. The invention is also useful prophylactically
CC   e.g., to prevent or delay infection, inflammation or tumour formation.
CC   The present sequence is an antisense oligo targetted to human ABC
CC   transporter MHC I DNA. This sequence is used to illustrate the method of
CC   the invention
XX
SQ   Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1461 CCTCAGTCTGGGGGAGCGG 1479
                ||||||  ||||  ||||| |
Db         20 CCTCAGCCTGGTGGAGCAG 2

RESULT 1062
AAL60972/c
ID   AAL60972 standard; DNA; 20 BP.
XX
AC   AAL60972;
XX
DT   22-SEP-2003  (first entry)
XX
DE   Human MyD88 antisense oligonucleotide, ISIS #190957.
XX
KW   Antisense; human; myeloid differentiation primary response gene 88;
KW   MyD88; Alzheimer's disease; neurodegenerative disease; schizophrenia;
KW   gene therapy; Down's syndrome; phosphorothioate; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidine residues
FT                    are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
```

```
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT
XX
PN   WO2003046132-A2.
XX
PD   05-JUN-2003.
XX
PF   20-NOV-2002; 2002WO-US037411.
XX
PR   23-NOV-2001; 2001US-00021707.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Karras JG,  Dobie K;
XX
DR   WPI; 2003-505193/47.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding MyD88, useful for preparing a composition for treating
PT   neurodegenerative disease, e.g. Alzheimer's disease.
XX
PS   Claim 3; Page 76; 106pp; English.
XX
CC   The invention relates to antisense compounds targetted to a nucleic acid
CC   encoding human MyD88 (myeloid differentiation primary response gene 88)
CC   to inhibits its expression. Antisense compounds of the invention are
CC   useful for preparing a composition for treating neurodegenerative disease
CC   e.g. Alzheimer's disease, Down's syndrome or schizophrenia. The invention
CC   is also useful in gene therapy. The present sequence is an antisense
CC   oligonucleotide targetted to human MyD88 DNA
XX
SQ   Sequence 20 BP; 7 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        836 TTGTCTTTGAGTACCTGGA 854
              | | ||||||||||| ||||
Db         19 TGGACTTTGAGTACTTGGA 1


RESULT 1063
ADC36216
ID   ADC36216 standard; DNA; 20 BP.
XX
AC   ADC36216;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Weed controller metabolism associated PCR primer SEQ ID NO:83.
XX
KW   weed controller metabolism; weed; herbicide; herbicide-resistant plant;
KW   agrochemical; ss; PCR; primer.
XX
OS   Synthetic.
XX
PN   WO2003040370-A1.
XX
PD   15-MAY-2003.
XX
PF   17-OCT-2002; 2002WO-JP010789.
XX
PR   19-OCT-2001; 2001JP-00321307.
PR   07-JUN-2002; 2002JP-00167239.
XX
PA   (SUMO ) SUMITOMO CHEM CO LTD.
XX
PI   Nakajima H,  Mukumoto F,  Takaishi M;
XX
DR   WPI; 2003-523102/49.
XX
PT   Weed controller metabolism proteins deactivating porphyrinogen oxidase
PT   (PPO)-inhibiting herbicides by N-demethylation and their genes, useful
PT   e.g. in constructing new breeds of herbicide-resistant plants.
XX
PS   Disclosure; SEQ ID NO 83; 812pp; Japanese.
XX
CC   The invention relates to a novel DNA encoding a weed controller
CC   metabolism protein. A protein of the invention has herbicide activity.
CC   The proteins and their encoded genes are useful e.g. in constructing new
CC   breeds of herbicide-resistant plants and also in developing various
CC   agrochemicals. The present sequence is used in the exemplification of the
CC   invention.
XX
SQ   Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1222 GTGGAGGAACAGCTACACT 1240
              |||||||||| ||| | ||
Db          1 GTGGAGGAACTGCTCCGCT 19


RESULT 1064
ADC35560/c
ID   ADC35560 standard; DNA; 20 BP.
XX
AC   ADC35560;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Human CD81/TAPA-1 antisense oligonucleotide #20.
XX
KW   Antisense; ss; human; CD81; TAPA-1; tetraspanin; viral infection;
KW   cocaine addiction; autoimmune disorder; antiinflammatory; antibacterial;
KW   virucide; antiparasitic; inflammatory disorder; parasitic infection;
KW   bacterial infection.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone and all cytidines are 5
FT                   -methyl cytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotide"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotide"
XX
PN   US2003113914-A1.
XX
PD   19-JUN-2003.
XX
PF   10-DEC-2001; 2001US-00006430.
XX
PR   10-DEC-2001; 2001US-00006430.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Graham MJ,  Dobie K;
XX
DR   WPI; 2003-810907/76.
XX
```

```
PT   Novel compound hybridizing with nucleic acid molecule encoding CD81 and
PT   inhibiting the expression of CD81, useful for treating infections and
PT   disease associated with expression of CD81 such as inflammation disorder.
XX
PS   Claim 3; SEQ ID NO 32; 55pp; English.
XX
CC   The invention relates to a compound (antisense oligonucleotide)
CC   hybridising with the eighth nucleobase portion of an active site on a
CC   nucleic acid molecule encoding CD81 (also known as TAPA-1, a tetraspanin)
CC   and inhibiting the expression of CD81. Also included is a composition
CC   comprising the antisense oligonucleotide and a carrier or a diluent. The
CC   antisense oligonucleotide is useful for inhibiting the expression of CD81
CC   in cells or tissues. The antisense oligonucleotide is also useful for
CC   treating infections preferably viral, bacterial and parasitic and
CC   diseases such as inflammatory disorders and autoimmune disorders. The
CC   disease or condition is characterised by chemical dependency (e.g.
CC   cocaine addiction). The present sequence is a CD81 antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        855 CAAGGACCTGAAGCAGTAC 873
              ||||||  ||||||||| |
Db         19 CAAGGATGTGAAGCAGTTC 1


RESULT 1065
AAD62975/c
ID   AAD62975 standard; DNA; 20 BP.
XX
AC   AAD62975;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Human PTTG1 antisense oligonucleotide ISIS #131034.
XX
KW   Human; antisense; pituitary tumour-transforming gene; securin; cancer;
KW   PTTG1; TUTR1; ESP-1 associated protein; gene therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidine residues
FT                    are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2003190629-A1.
XX
PD   09-OCT-2003.
XX
PF   23-APR-2002; 2002US-00131544.
XX
PR   02-APR-2002; 2002US-00114683.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Watt AT;
XX
DR   WPI; 2003-831618/77.
XX
PT   New compound, having a sequence targeted to a nucleic acid encoding
PT   PTTG1, useful for preparing a composition for treating e.g. pituitary,
PT   colorectal, breast, testicular, pulmonary or epithelial cancers.
XX
PS   Claim 3; Page 25; 0pp; English.
XX
CC   The invention relates to novel antisense compounds targetted to a nucleic
CC   acid encoding (pituitary tumour-transforming gene) PTTG1 (also known as
CC   securin, TUTR1 and ESP-1 associated protein) to inhibit its expression.
CC   Antisense compounds of the invention are useful for preparing
CC   compositions for treating pituitary, breast, colorectal, testicular,
CC   pulmonary and epithelial cancer. The invention is also used in gene
CC   therapy. The present sequence is an antisense oligonucleotide targetted
CC   to human PTTG1 DNA. This sequence is used in the exemplification of the
CC   invention
XX
SQ   Sequence 20 BP; 6 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1010 AGAGGGGAGAGCTCAAGCT 1028
              ||| |||||| |||||| |
Db         19 AGATGGGAGATCTCAAGTT 1


RESULT 1066
ADF88196
ID   ADF88196 standard; DNA; 20 BP.
XX
AC   ADF88196;
XX
DT   26-FEB-2004  (first entry)
XX
DE   Single nucleotide polymorphism detection primer, SEQ ID No 1779.
XX
KW   human; single nucleotide polymorphism; microarray; side effect; ss;
KW   primer; PCR.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   JP2003235571-A.
XX
PD   26-AUG-2003.
XX
PF   12-FEB-2002; 2002JP-00034717.
XX
PR   12-FEB-2002; 2002JP-00034717.
XX
PA   (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR   WPI; 2003-820454/77.
XX
PT   Novel polynucleotide useful for detecting single nucleotide polymorphisms
PT   in human gene.
XX
PS   Claim 2; SEQ ID NO 1779; 704pp; Japanese.
XX
CC   The invention relates to a novel polynucleotide isolated and purified
CC   from a human gene having any one of 935 fully defined sequences as given
CC   in specification, or a sequence having a base substitution. The invention
CC   further relates to: an oligonucleotide containing single nucleotide
CC   polymorphisms; a PCR primer set chosen from the combination of two DNA
CC   fragments from any one of 1220 fully defined sequences as given in
CC   specification; a labelling probe containing the SNP containing oligo; and
CC   a microarray equipped with the SNP containing oligo. The isolated human
CC   gene of the invention is useful for detecting the single nucleotide
CC   polymorphisms in human gene. The isolated human gene is also useful for
```

```
CC   diagnosis of disease and determination of side effect to a medical agent.
CC   The isolated human gene is also effective in detecting single nucleotide
CC   polymorphisms in a human gene. This polynucleotide sequence represents
CC   one of the PCR primers used in the single nucleotide polymorphism
CC   detection method of the invention.
XX
SQ   Sequence 20 BP; 7 A; 7 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1611 CTAAGCCACAGACCGAGGC 1629
              ||||||||||  || ||||
Db          2 CTAAGCCACAATCCAAGGC 20


RESULT 1067
ADF90989
ID   ADF90989 standard; DNA; 20 BP.
XX
AC   ADF90989;
XX
DT   26-FEB-2004  (first entry)
XX
DE   Microorganism detection PCR primer, SEQ ID 72.
XX
KW   Detection; microorganism; PCR; primer; bacterium; fungus; protozoan;
KW   virus; diarrhoea; food poisoning; ss.
XX
OS   Listeria monocytogenes.
XX
PN   JP2003164282-A.
XX
PD   10-JUN-2003.
XX
PF   29-NOV-2001; 2001JP-00365153.
XX
PR   29-NOV-2001; 2001JP-00365153.
XX
PA   (RAKA-) RAKAN KK.
PA   (GIFU-) GIFU DAIGAKUCHO.
XX
DR   WPI; 2003-793230/75.
XX
PT   Rapid, sensitive detection of specific or unspecified microbes causing
PT   diarrhea and food poisoning, using primers which target universal and
PT   specific genes, and amplifying by PCR under heat cycle conditions
PT   suitable for many detections.
XX
PS   Disclosure; SEQ ID NO 72; 69pp; Japanese.
XX
CC   The present invention relates to a method for detecting microorganisms
CC   using primers (ADF90918-ADF91145). The method is used for detecting
CC   microorganisms (bacteria, fungi, protozoa, viruses) which cause diarrhoea
CC   symptoms, and pathogenic microbe of food poisoning. The method can be
CC   used to detect unspecified microbes, or specific pathogens, or for the
CC   simultaneous detection of many kinds of microorganism.
XX
SQ   Sequence 20 BP; 5 A; 6 C; 1 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1503 TTCCATATTTGCACTAAAG 1521
              ||||||  ||| |||||| |
Db          2 TTCCATCTTTCCACTAATG 20


RESULT 1068
ABZ93135
ID   ABZ93135 standard; DNA; 20 BP.
XX
AC   ABZ93135;
XX
DT   17-OCT-2003  (first entry)
XX
DE   Human oligonucleotide sequence.
XX
KW   Human; antisense; lung dysfunction; nasal airway dysfunction;
KW   antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW   antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW   antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW   adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW   lung inflammation; respiratory disease; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285308-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013135.
XX
PR   24-APR-2001; 2001US-0286137P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-229219/22.
XX
PT   Pharmaceutical composition for treating ailments associated with impaired
PT   respiration, has oligo(s) antisense to specific gene(s) or its
PT   corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT   ubiquinone.
XX
PS   Disclosure; SEQ ID NO 8377; 872pp; English.
XX
CC   The invention relates to a novel pharmaceutical composition, which has a
CC   first active agent comprising an oligonucleotide antisense to the
CC   initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC   5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC   junctions of genes encoding a polypeptide associated with lung and/or
CC   nasal airway dysfunction and a second active agent comprising an
CC   antiinflammatory steroid and ubiquinone. A composition of the invention
CC   has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC   immunosuppressive, and cytostatic activity. The composition may have a
CC   use in antisense gene therapy. The composition is useful for treating or
CC   preventing a respiratory, lung or malignant disease or condition, also
CC   for enhancing the prophylactic or therapeutic respiratory effect of an
CC   antiinflammatory steroid in a subject, for reducing or depleting levels
CC   of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC   receptor, producing bronchodilation, increasing levels of ubiquinone or
CC   lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC   lung inflammation, lung allergies, or a respiratory disease or condition.
CC   Note: The sequence data for this patent is not represented in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1521 GGAGATTCAGCTACAAAAG 1539
              ||| ||||| || ||||||
Db          1 GGAAATTCACCTTCAAAAG 19


RESULT 1069
ABZ85058/c
ID   ABZ85058 standard; DNA; 20 BP.
```

XX
AC ABZ85058;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 300; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 2 A; 4 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 623 AGCTGGACAAACTGGGCGA 641
| ||| ||||||||| |||
Db 19 ACCTGAACAAACTGGCCGA 1

RESULT 1070
ABZ85420/c
ID ABZ85420 standard; DNA; 20 BP.

XX
AC ABZ85420;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 662; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 4 A; 7 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1029 GGCTGACTTTGGCCTGGCC 1047
||||| | ||| |||||||
Db 19 GGCTGCCCTTGACCTGGCC 1

RESULT 1071
ABZ85267/c
ID ABZ85267 standard; DNA; 20 BP.

XX
AC ABZ85267;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 509; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1403 TGCAGTTTGAGGGTCGAAA 1421
|||| |||||||| || ||
Db 19 TGCACTTTGAGGGCCGCAA 1

RESULT 1072
ABZ84777/c
ID ABZ84777 standard; DNA; 20 BP.

XX
AC ABZ84777;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 19; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 993 GAACCTGCTCATCAACGAG 1011
|||||||||||| | ||
Db 19 GAACCTGCTCATCTCCAAG 1

RESULT 1073
ABZ87947
ID ABZ87947 standard; DNA; 20 BP.

XX
AC ABZ87947;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 3189; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 10 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1008 CGAGAGGGGAGAGCTCAAG 1026
||||| | ||||| |||||
Db 1 CGAGAAGAGAGAGATCAAG 19

RESULT 1074
ABZ87022/c
ID ABZ87022 standard; DNA; 20 BP.

XX
AC ABZ87022;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 2264; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 7 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1394 CCAAGCTGTTGCAGTTTGA 1412
||||||| || | |||||
Db 19 CCAAGCTGATGTACTTTGA 1

RESULT 1075
ABZ88149/c
ID ABZ88149 standard; DNA; 20 BP.

XX
AC ABZ88149;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 3391; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 3 A; 3 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 994 AACCTGCTCATCAACGAGA 1012
|| |||||||||| | |||
Db 19 ACCCTGCTCATCAGCAAGA 1

RESULT 1076
ABZ87509/c
ID ABZ87509 standard; DNA; 20 BP.

XX
AC ABZ87509;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 2751; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 2 A; 6 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 715 CTGGAACATGAAGAGGGGG 733
|||||||||||||| | |
Db 20 CTGGAACATGAAGAAAGAG 2

RESULT 1077
ABV77015/c
ID ABV77015 standard; DNA; 20 BP.

XX
AC ABV77015;
XX
DT 03-MAR-2003 (first entry)
XX
DE Primer ITS3 used to amplify fungal nuclear rDNA ITS region.
XX
KW Internal transcribed spacer region; ITS region; fungal pathogen;
KW Colletotrichum acutatum; Alternaria; Cladosporium carpophilum; PCR;
KW primer; ss.
XX
OS Synthetic.
XX
PN WO200277293-A2.
XX
PD 03-OCT-2002.
XX
PF 08-MAR-2002; 2002WO-EP002581.
XX
PR 09-MAR-2001; 2001US-0274540P.
PR 24-AUG-2001; 2001US-00939379.
XX
PA (SYGN) SYNGENTA PARTICIPATIONS AG.
XX
PI Beck JJ, Barnett CJ, Perry CV;
XX
DR WPI; 2003-092859/08.
XX
PT New internal transcribed spacer-derived oligonucleotide primer useful for
PT detecting fungal pathogens such as Colletotrichum acutatum, Alternaria
PT spp. or Cladosporium carpophilum.
XX
PS Example 6; Page 20; 51pp; English.
XX
CC PCR primers ABV77013-16 represent conserved primers designed for
CC amplification of the fungal nuclear ribosomal RNA internal transcribed
CC spacer (ITS) region. The primers are useful for detecting a fungal
CC pathogen such as Colletotrichum acutatum, Alternaria spp. or Cladosporium
CC carpophilum. The primers are useful for detecting specific isolates of
CC fungal pathogens and for monitoring disease development in plant
CC populations, for assessing potential damage in a specific crop
CC variety/pathogen strain relationship, for providing detailed information
CC on the development and spread of specific pathogen races over extended
CC geographical areas, and for detecting diseases with long latent phase
XX
SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1549 CTTCGGTCTTCGTCGATGC 1567
|| || ||||| |||||||
Db 19 CTGCGTTCTTCATCGATGC 1

RESULT 1078
ABV77014
ID ABV77014 standard; DNA; 20 BP.
XX
AC ABV77014;
XX
DT 03-MAR-2003 (first entry)
XX
DE Primer ITS2 used to amplify fungal nuclear rDNA ITS region.
XX
KW Internal transcribed spacer region; ITS region; fungal pathogen;
KW Colletotrichum acutatum; Alternaria; Cladosporium carpophilum; PCR;
KW primer; ss.
XX
OS Synthetic.
XX
PN WO200277293-A2.
XX
PD 03-OCT-2002.
XX
PF 08-MAR-2002; 2002WO-EP002581.
XX
PR 09-MAR-2001; 2001US-0274540P.
PR 24-AUG-2001; 2001US-00939379.
XX
PA (SYGN) SYNGENTA PARTICIPATIONS AG.
XX
PI Beck JJ, Barnett CJ, Perry CV;
XX
DR WPI; 2003-092859/08.
XX
PT New internal transcribed spacer-derived oligonucleotide primer useful for
PT detecting fungal pathogens such as Colletotrichum acutatum, Alternaria
PT spp. or Cladosporium carpophilum.
XX
PS Example 6; Page 20; 51pp; English.
XX
CC PCR primers ABV77013-16 represent conserved primers designed for
CC amplification of the fungal nuclear ribosomal RNA internal transcribed
CC spacer (ITS) region. The primers are useful for detecting a fungal
CC pathogen such as Colletotrichum acutatum, Alternaria spp. or Cladosporium
CC carpophilum. The primers are useful for detecting specific isolates of
CC fungal pathogens and for monitoring disease development in plant
CC populations, for assessing potential damage in a specific crop
CC variety/pathogen strain relationship, for providing detailed information
CC on the development and spread of specific pathogen races over extended
CC geographical areas, and for detecting diseases with long latent phase
XX
SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1549 CTTCGGTCTTCGTCGATGC 1567
|| || ||||| |||||||
Db 2 CTGCGTTCTTCATCGATGC 20

RESULT 1079
ACA61050
ID ACA61050 standard; DNA; 20 BP.
XX
AC ACA61050;
XX
DT 14-JUL-2003 (first entry)
XX
DE Guignardia internal transcribed spacer (ITS) reverse primer #2.
XX
KW Guignardia; pathogen; internal transcribed spacer; ITS; citrus fruit;
KW intergenic sequence; intronic sequence; calmodulin; chitin synthase;
KW citrus blackspot; PCR; primer; ss.
XX
OS Guignardia sp.
XX
PN WO2003031933-A2.
XX
PD 17-APR-2003.
XX
PF 09-OCT-2002; 2002WO-US032227.
XX
PR 09-OCT-2001; 2001US-0327982P.
XX
PA (UYOR-) UNIV OREGON.
XX
PI Carroll GC;
XX
DR WPI; 2003-372133/35.
XX
PT Differentiating pathogenic and non-pathogenic Guignardia sp., by

PT assessing hybridization between DNA from Guignardia- infected citrus and
PT probes based on intronic sequences from calmodulin and chitin synthase
PT genes.
XX
PS Example 1; Page 19; 37pp; English.
XX
CC The invention decsribes a method of differentiating pathogenic and non-
CC pathogenic species of Guignardia (I). The method comprises obtaining a
CC DNA sample from a citrus fruit infected with (I), immobilising the DNA,
CC probing the immobilised DNA with a probe based on intergenic sequences
CC and intronic sequences from within the calmodulin and chitin synthase
CC genes, and demonstrating hybridisation with the probes to represent the
CC pathogenic species and non-pathogenic species. The method is specific,
CC rapid and useful for differentiating pathogenic species (e.g. Guignardia
CC citricarpa, the causative agent of citrus blackspot) from non-pathogenic
CC species of Guignardia. This sequence represents a primer used to isolate
CC an internal transcribed spacer to allow characterisation of pathogenic
CC Guignardia
XX
SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1549 CTTCGGTCTTCGTCGATGC 1567
|| || ||||| |||||||
Db 2 CTGCGTTCTTCATCGATGC 20

RESULT 1080
ACA61051/c
ID ACA61051 standard; DNA; 20 BP.
XX
AC ACA61051;
XX
DT 14-JUL-2003 (first entry)
XX
DE Guignardia internal transcribed spacer (ITS) forward primer #3.
XX
KW Guignardia; pathogen; internal transcribed spacer; ITS; citrus fruit;
KW intergenic sequence; intronic sequence; calmodulin; chitin synthase;
KW citrus blackspot; PCR; primer; ss.
XX
OS Guignardia sp.
XX
PN WO2003031933-A2.
XX
PD 17-APR-2003.
XX
PF 09-OCT-2002; 2002WO-US032227.
XX
PR 09-OCT-2001; 2001US-0327982P.
XX
PA (UYOR-) UNIV OREGON.
XX
PI Carroll GC;
XX
DR WPI; 2003-372133/35.
XX
PT Differentiating pathogenic and non-pathogenic Guignardia sp., by
PT assessing hybridization between DNA from Guignardia- infected citrus and
PT probes based on intronic sequences from calmodulin and chitin synthase
PT genes.
XX
PS Example 1; Page 20; 37pp; English.
XX
CC The invention decsribes a method of differentiating pathogenic and non-
CC pathogenic species of Guignardia (I). The method comprises obtaining a
CC DNA sample from a citrus fruit infected with (I), immobilising the DNA,
CC probing the immobilised DNA with a probe based on intergenic sequences
CC and intronic sequences from within the calmodulin and chitin synthase
CC genes, and demonstrating hybridisation with the probes to represent the
CC pathogenic species and non-pathogenic species. The method is specific,
CC rapid and useful for differentiating pathogenic species (e.g. Guignardia
CC citricarpa, the causative agent of citrus blackspot) from non-pathogenic
CC species of Guignardia. This sequence represents a primer used to isolate
CC an internal transcribed spacer to allow characterisation of pathogenic
CC Guignardia
XX
SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1549 CTTCGGTCTTCGTCGATGC 1567
|| || ||||| |||||||
Db 19 CTGCGTTCTTCATCGATGC 1

RESULT 1081
ABZ21316/c
ID ABZ21316 standard; DNA; 20 BP.
XX
AC ABZ21316;
XX
DT 24-FEB-2003 (first entry)
XX
DE PCR primer for the isolation of peptide Vc1.1 #SEQ ID 5.
XX
KW Alpha-conotoxin; cerebroprotective; analgesic; anticonvulsant;
KW neuroleptic; antiparkinsonian; cytostatic; nootropic; neuroprotective;
KW neuronal nicotinic acetylcholine receptor; nAChR; inhibitor; stroke;
KW pain; cancer related pain; post-surgical pain; oral pain;
KW referred trigeminal neuralgia; post-herpetic neuralgia;
KW phantom limb pain; fibromyalgia; reflex sympathetic dystrophy;
KW rheumatoid arthritis; inflammatory arthritis; neurogenic pain;
KW neuropathic pain; epilepsy; nicotine addiction; schizophrenia;
KW Parkinson's disease; small cell lung carcinoma; Alzheimer's disease;
KW nerve injury; PCR; primer; ss.
XX
OS Conus victoriae.
XX
PN WO200279236-A1.
XX
PD 10-OCT-2002.
XX
PF 28-MAR-2002; 2002WO-AU000411.
XX
PR 29-MAR-2001; 2001AU-00004094.
XX
PA (LIVE/) LIVETT B.
PA (KHAL/) KHALIL Z.
PA (GAYL/) GAYLER K.
PA (DOWN/) DOWN J.
XX
PI Livett B, Khalil Z, Gayler K, Down J;
XX
DR WPI; 2003-103260/09.
XX
PT New alpha- conotoxin-like peptides that inhibit the activity of neuronal
PT nicotinic acetylcholine receptor, useful for treating stroke, pain,
PT schizophrenia, Parkinson's disease, small cell lung carcinoma or
PT Alzheimer's disease.
XX
PS Claim 18; Page 31; 87pp; English.
XX
CC The invention relates to an isolated alpha-conotoxin-like peptide
CC sequence. The activity of peptides of the invention may be described as
CC cerebroprotective, analgesic, anticonvulsant, neuroleptic,
CC antiparkinsonian, cytostatic, nootropic and neuroprotective. Peptides of
CC the invention are neuronal nicotinic acetylcholine receptor (nAChR)
CC inhibitors. The alpha-conotoxin-like peptide is useful for treating a
CC condition mediated by a neuronal nicotinic acetylcholine receptor, e.g.
CC stroke, pain (e.g. cancer related pain, post-surgical pain, oral or

CC dental pain, referred trigeminal neuralgia, post-herpetic neuralgia,
CC phantom limb pain, fibromyalgia, reflex sympathetic dystrophy, pain
CC associated with inflammatory conditions, rheumatoid arthritis or
CC inflammatory arthritis, or pain resulting from conditions associated with
CC neurogenic or neuropathic pain), epilepsy, nicotine addiction,
CC schizophrenia, Parkinson's disease, small cell lung carcinoma, or
CC Alzheimer's disease. The alpha-conotoxin-like peptide is also useful for
CC accelerating recovery from nerve injury. The peptides are also useful as
CC research reagents for investigating nicotinic acetylcholine receptor
CC physiology and pharmacology. The current sequence represents a PCR primer
CC for the isolation of peptide Vc1.1
XX
SQ Sequence 20 BP; 4 A; 2 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 889 AACATCATCAACATGCACA 907
||||||||| ||||| ||
Db 20 AACATCATCCGCATGCCCA 2

RESULT 1082
ADK66856/c
ID ADK66856 standard; DNA; 20 BP.
XX
AC ADK66856;
XX
DT 06-MAY-2004 (first entry)
XX
DE Mouse VH alpha TAG DNA specific primer, B72.3/CC92 HC.
XX
KW Heavy chain variable region; VH;
KW tumour-associated sialylated glycoprotein antigen; TAG-72; therapy;
KW cancer; diagnosis; gene therapy; cytostatic; mouse; VH alpha TAG DNA;
KW primer; ss.
XX
OS Mus musculus.
XX
PN US6641999-B1.
XX
PD 04-NOV-2003.
XX
PF 14-FEB-2000; 2000US-00503653.
XX
PR 19-OCT-1988; 88US-00259943.
PR 24-OCT-1988; 88US-00261942.
PR 19-OCT-1989; 89US-00424362.
PR 31-MAR-1993; 93US-00040687.
PR 24-MAR-1997; 97US-00823105.
XX
PA (DOWC) DOW CHEM CO.
XX
PI Mezes PS, Gourlie B, Rixon MW, Anderson WHK;
XX
DR WPI; 2003-851359/79.
XX
PT Finding polynucleotide encoding an antibody against tumor-associated
PT glycoprotein antigen-72 (TAG-72), for treating cancer, by providing a
PT test medium with murine anti-TAG-72 heavy variable region-encoding
PT polynucleotide.
XX
PS Example; SEQ ID NO 44; 120pp; English.
XX
CC The present invention relates to a method of finding at least one murine
CC heavy chain variable region (VH)-encoding polynucleotide encoding at
CC least the VH of an antibody having binding specificity for tumour-
CC associated sialylated glycoprotein antigen (TAG-72). The method involves
CC providing at least one test medium containing at least one murine anti-
CC TAG-72 VH-encoding polynucleotide comprising at least one 5'-non-
CC translated region (5'-NTR) of a murine anti-TAG-72 VH-encoding gene. The
CC process is useful in finding at least one murine VH-encoding
CC polynucleotide encoding at least the VH of an antibody having binding
CC specificity for TAG-72. The antibodies against TAG-72 and compositions
CC are useful in treating cancer, in in vivo diagnostic assays, in vivo
CC therapy or radioimmunoguided surgery. The invention is also useful in
CC gene therapy. The present sequence is mouse VH alpha TAG DNA specific
CC primer used in the exemplification of the invention.
XX
SQ Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1293 GTCCAACGAGGAGTTCAAG 1311
|| ||| ||| ||||||||
Db 20 GTACAATGAGAAGTTCAAG 2

RESULT 1083
ADK66836/c
ID ADK66836 standard; DNA; 20 BP.
XX
AC ADK66836;
XX
DT 06-MAY-2004 (first entry)
XX
DE Mouse B72.3/CC92 antibody heavy chain DNA specific primer.
XX
KW Heavy chain variable region; VH;
KW tumour-associated sialylated glycoprotein antigen; TAG-72; therapy;
KW cancer; diagnosis; gene therapy; cytostatic; mouse; primer; ss.
XX
OS Mus musculus.
XX
PN US6641999-B1.
XX
PD 04-NOV-2003.
XX
PF 14-FEB-2000; 2000US-00503653.
XX
PR 19-OCT-1988; 88US-00259943.
PR 24-OCT-1988; 88US-00261942.
PR 19-OCT-1989; 89US-00424362.
PR 31-MAR-1993; 93US-00040687.
PR 24-MAR-1997; 97US-00823105.
XX
PA (DOWC) DOW CHEM CO.
XX
PI Mezes PS, Gourlie B, Rixon MW, Anderson WHK;
XX
DR WPI; 2003-851359/79.
XX
PT Finding polynucleotide encoding an antibody against tumor-associated
PT glycoprotein antigen-72 (TAG-72), for treating cancer, by providing a
PT test medium with murine anti-TAG-72 heavy variable region-encoding
PT polynucleotide.
XX
PS Example; SEQ ID NO 24; 120pp; English.
XX
CC The present invention relates to a method of finding at least one murine
CC heavy chain variable region (VH)-encoding polynucleotide encoding at
CC least the VH of an antibody having binding specificity for tumour-
CC associated sialylated glycoprotein antigen (TAG-72). The method involves
CC providing at least one test medium containing at least one murine anti-
CC TAG-72 VH-encoding polynucleotide comprising at least one 5'-non-
CC translated region (5'-NTR) of a murine anti-TAG-72 VH-encoding gene. The
CC process is useful in finding at least one murine VH-encoding
CC polynucleotide encoding at least the VH of an antibody having binding
CC specificity for TAG-72. The antibodies against TAG-72 and compositions
CC are useful in treating cancer, in in vivo diagnostic assays, in vivo
CC therapy or radioimmunoguided surgery. The invention is also useful in
CC gene therapy. The present sequence is mouse B72.3/CC92 immunoglobulin
CC heavy chain DNA specific primer used in the exemplification of the

```
CC   invention.
XX
SQ   Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1293 GTCCAACGAGGAGTTCAAG 1311
              || ||| ||| ||||||||
Db         20 GTACAATGAGAAGTTCAAG 2


RESULT 1084
ABD24379/c
ID   ABD24379 standard; DNA; 20 BP.
XX
AC   ABD24379;
XX
DT   29-JUL-2004  (first entry)
XX
DE   AI672565-derived oligonucleotide SEQ ID 3391.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 3391; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 3 A; 3 C; 8 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        994 AACCTGCTCATCAACGAGA 1012
              | |||||||||||  | |||
Db         19 ACCCTGCTCATCAGCAAGA 1


RESULT 1085
ABD21650/c
ID   ABD21650 standard; DNA; 20 BP.
XX
AC   ABD21650;
XX
DT   29-JUL-2004  (first entry)
XX
DE   S100 calcium binding protein A2-derived oligo SEQ ID 662.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 662; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
```

CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 4 A; 7 C; 8 G; 1 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1029 GGCTGACTTTGGCCTGGCC 1047
              ||||| | ||| |||||||
Db         19 GGCTGCCCTTGACCTGGCC 1
```

RESULT 1086
ABD29365
ID ABD29365 standard; DNA; 20 BP.
XX
AC ABD29365;
XX
DT 29-JUL-2004 (first entry)
XX
DE AA001432-derived oligonucleotide SEQ ID 8377.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 8377; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1521 GGAGATTCAGCTACAAAAG 1539
              ||| ||||| || ||||||
Db          1 GGAAATTCACCTTCAAAAG 19
```

RESULT 1087
ABD23252/c
ID ABD23252 standard; DNA; 20 BP.
XX
AC ABD23252;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human myosin X-derived oligonucleotide SEQ ID 2264.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.

XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 2264; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 7 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1394 CCAAGCTGTTGCAGTTTGA 1412
              ||||||| || | |||||
Db         19 CCAAGCTGATGTACTTTGA 1
```

RESULT 1088
ABD24177
ID ABD24177 standard; DNA; 20 BP.
XX
AC ABD24177;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human calmodulin 2-derived oligonucleotide SEQ ID 3189.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 3189; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 10 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1008 CGAGAGGGGAGAGCTCAAG 1026
              ||||| | ||||| |||||
Db          1 CGAGAAGAGAGAGATCAAG 19
```

```
RESULT 1089
ABD21007/c
ID   ABD21007 standard; DNA; 20 BP.
XX
AC   ABD21007;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human transglutaminase-derived oligo SEQ ID 19.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 19; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        993 GAACCTGCTCATCAACGAG 1011
              ||||||||||||  | ||
Db         19 GAACCTGCTCATCTCCAAG 1


RESULT 1090
ABD21288/c
ID   ABD21288 standard; DNA; 20 BP.
XX
AC   ABD21288;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human transglutaminase-derived oligo SEQ ID 300.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 300; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
```

CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 2 A; 4 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 623 AGCTGGACAAACTGGGCGA 641
| ||| ||||||||| |||
Db 19 ACCTGAACAAACTGGCCGA 1

RESULT 1091
ABD21497/c
ID ABD21497 standard; DNA; 20 BP.
XX
AC ABD21497;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human transglutaminase-derived oligo SEQ ID 509.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 509; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1403 TGCAGTTTGAGGGTCGAAA 1421
|||| |||||||| || ||
Db 19 TGCACTTTGAGGGCCGCAA 1

RESULT 1092
ABD23739/c
ID ABD23739 standard; DNA; 20 BP.
XX
AC ABD23739;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human myosin X-derived oligonucleotide SEQ ID 2751.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense

```
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 2751; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 2 A; 6 C; 2 G; 10 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        715 CTGGAACATGAAGAGGGGG 733
              ||||||||||||||  | |
Db         20 CTGGAACATGAAGAAAGAG 2


RESULT 1093
ADG42473/c
ID   ADG42473 standard; DNA; 20 BP.
XX
AC   ADG42473;
XX
DT   26-FEB-2004  (first entry)
XX
DE   Human PTTG1 antisense oligonucleotide ISIS131034.
XX
KW   Human; ss; antisense gene therapy; PTTG1;
KW   pituitary tumour-transforming gene 1; securin; TUTR1;
KW   ESP-1 associated protein; cytostatic; antiinflammatory; inflammation;
KW   tumour.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phophorothioate backbone.All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotides"
XX
PN   US2003194396-A1.
XX
PD   16-OCT-2003.
XX
PF   02-APR-2002; 2002US-00114683.
XX
PR   02-APR-2002; 2002US-00114683.
XX
PA   (ISIS-) ISIS PHARM INC.
PA   (ABBO ) ABBOTT LAB.
XX
PI   Watt AT,  Luo Y;
XX
DR   WPI; 2004-041251/04.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding human
PT   pituitary tumor-transforming gene useful for prophylaxis of e.g.
PT   inflammation and tumor formation.
XX
PS   Example 15; SEQ ID NO 30; 46pp; English.
XX
CC   The invention relates to an antisense compound having a length of 8 - 50
CC   nucleotides and targeted to a nucleic acid molecule encoding human
CC   pituitary tumour-transforming gene (PTTG1, also known as securin, TUTR1
CC   or ESP-1 associated protein). The antisense oligonucleotides are useful
CC   for inhibiting the expression of PTTG1 in human cells or tissues, for
CC   treating diseases associated with PTTG1, as tools in differential and/or
CC   combinatorial analysis to elucidate expression patterns of a portion of
CC   the entire complement of genes expressed within cells and tissues, for
CC   diagnostics, therapeutics, and prophylaxis of e.g. inflammation, tumour
CC   formation and as research reagents and kits. The present sequence is an
CC   antisense oligonucleotide of the invention, targeting human PTTG1.
XX
SQ   Sequence 20 BP; 6 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1010 AGAGGGGAGAGCTCAAGCT 1028
              ||| |||||| |||||| |
Db         19 AGATGGGAGATCTCAAGTT 1


RESULT 1094
ADE44005/c
ID   ADE44005 standard; DNA; 20 BP.
XX
AC   ADE44005;
XX
DT   26-FEB-2004  (first entry)
XX
DE   MUC-1 related PCR primer 2006MUC1.
XX
KW   MUC-1; cytostatic; vaccine; tumour; carcinoma; immune response;
KW   cytotoxic T lymphocyte; antibody response; human; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO2003099193-A2.
XX
PD   04-DEC-2003.
XX
PF   23-MAY-2003; 2003WO-EP005595.
XX
```

PR 24-MAY-2002; 2002GB-00012036.
XX
PA (GLAX) GLAXO GROUP LTD.
XX
PI Burden N, Hamblin P;
XX
DR WPI; 2004-035026/03.
XX
PT New nucleic acid molecule encoding a MUC-1 derivative that is devoid of
PT all perfect repeats, useful as vaccine for treating or preventing MUC-1
PT expressing tumors e.g. carcinoma of the breast, lung or gastrointestinal
PT carcinomas.
XX
PS Example; Page 34; 34pp; English.
XX
CC The present invention describes a nucleic acid molecule encoding a MUC-1
CC derivative that is devoid of all perfect repeats. Also described: (1) a
CC plasmid comprising the DNA molecule; (2) a protein encoded by a nucleic
CC acid molecule; (3) a pharmaceutical composition comprising the nucleic
CC acid, the plasmid or the protein and a pharmaceutical acceptable
CC excipient, diluent or carrier; and (4) a method of treating or preventing
CC tumours. MUC-1 has cytostatic activity, and can be used in vaccines. The
CC nucleic acid, plasmid, a protein or the pharmaceutical composition of the
CC present invention can be used in medicine. The nucleic acid or the
CC protein can be used in the preparation of a medicament for the treatment
CC or prevention MUC-1 expressing tumours. The tumour can be carcinomas of
CC the breast, lung, gastric or other gastrointestinal carcinomas. The
CC nucleic acid vaccines are easy to produce in large quantities compared
CC over conventional protein vaccination. Even at small doses they have been
CC reported to induce strong immune responses and can induce a cytotoxic T
CC lymphocyte immune response as well as an antibody response. The present
CC sequence represents a PCR primer which is used in the exemplification of
CC the present invention.
XX
SQ Sequence 20 BP; 6 A; 9 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1015 GGAGAGCTCAAGCTGGCTG 1033
|||| |||| ||||||||
Db 20 GGAGTGCTCTTGCTGGCTG 2

RESULT 1095
ADF32644/c
ID ADF32644 standard; DNA; 20 BP.
XX
AC ADF32644;
XX
DT 26-FEB-2004 (first entry)
XX
DE MUC-1 related PCR primer 2006MUC1.
XX
KW MUC-1 antigen; immune response; MUC-1; variable number of tandem repeat;
KW VNTR; repeat unit; tumour; metastasis; cytostatic; vaccine; gene therapy;
KW PCR primer; ss.
XX
OS Synthetic.
XX
PN WO2003100060-A2.
XX
PD 04-DEC-2003.
XX
PF 23-MAY-2003; 2003WO-EP005594.
XX
PR 24-MAY-2002; 2002GB-00012046.
XX
PA (GLAX) GLAXO GROUP LTD.
XX
PI Burden N, Ellis JH, Hamblin PA;
XX
DR WPI; 2004-042811/04.
XX
PT New nucleic acid molecule encoding a MUC-1 antigen, useful for preparing
PT a composition for treating or preventing tumors or metastases.
XX
PS Example; Page 66; 66pp; English.
XX
CC The present invention describes a nucleic acid molecule which encodes a
CC MUC-1 antigen. The nucleic acid is capable of raising an immune response
CC in vivo, has reduced susceptibility to recombination than full-length MUC
CC -1 and comprises between 1 and 15 variable number of tandem repeats
CC (VNTR) perfect repeat units. Also described: (1) a plasmid comprising the
CC DNA molecule; (2) a protein encoded by the nucleic acid; (3) a
CC pharmaceutical composition comprising the nucleic acid, plasmid or
CC protein and an excipient, diluent or carrier; and (4) a method of
CC treating or preventing tumours or metastases. A MUC1 antigen has
CC cytostatic activity, and can be used in vaccines, and in gene therapy.
CC The nucleic acid is useful for preparing a composition for treating or
CC preventing tumours or metastases. The present sequence is used in the
CC exemplification of the present invention.
XX
SQ Sequence 20 BP; 6 A; 9 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1015 GGAGAGCTCAAGCTGGCTG 1033
|||| |||| ||||||||
Db 20 GGAGTGCTCTTGCTGGCTG 2

RESULT 1096
ADG72400/c
ID ADG72400 standard; DNA; 20 BP.
XX
AC ADG72400;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human E2-EPF antisense oligonucleotide ISIS 156928.
XX
KW ss; E2-EPF; autoimmune disease; skin disease; pemphigus foliaceus; human;
KW antisense.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US2003232436-A1.
XX
PD 18-DEC-2003.
XX
PF 14-JUN-2002; 2002US-00173240.
XX
PR 14-JUN-2002; 2002US-00173240.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP, Dobie KW;
XX
DR WPI; 2004-052171/05.
XX
PT New antisense oligonucleotide targeted to a nucleic acid encoding E2-EPF,
PT useful for treating an autoimmune disease, preferably a skin disease,
PT such as, pemphigus foliaceus.
XX
PS Example 15; SEQ ID NO 39; 45pp; English.
XX
CC The invention relates to a compound targeted to, and which specifically
CC hybridises with, a nucleic acid molecule encoding E2-EPF, and that
CC inhibits the expression of E2-EPF. The compound, composition and methods
CC are useful for treating a disease or condition associated with E2-EPF,
CC such as an autoimmune disease, preferably a skin disease such as

```
CC   pemphigus foliaceus. They are also useful in research and diagnostics for
CC   modulating the expression of E2-EPF. The present sequence represents a
CC   human E2-EPF antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        275 CTGCTCCTGGGGAACTTCG 293
              |||||| ||| ||||| ||
Db         19 CTGCTCTTGGAGAACTACG 1


RESULT 1097
ADG72433
ID   ADG72433 standard; DNA; 20 BP.
XX
AC   ADG72433;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human E2-EPF target region ISIS 72351.
XX
KW   ss; E2-EPF; autoimmune disease; skin disease; pemphigus foliaceus; human.
XX
OS   Homo sapiens.
XX
PN   US2003232436-A1.
XX
PD   18-DEC-2003.
XX
PF   14-JUN-2002; 2002US-00173240.
XX
PR   14-JUN-2002; 2002US-00173240.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Dobie KW;
XX
DR   WPI; 2004-052171/05.
XX
PT   New antisense oligonucleotide targeted to a nucleic acid encoding E2-EPF,
PT   useful for treating an autoimmune disease, preferably a skin disease,
PT   such as, pemphigus foliaceus.
XX
PS   Example 15; SEQ ID NO 72; 45pp; English.
XX
CC   The invention relates to a compound targeted to, and which specifically
CC   hybridises with, a nucleic acid molecule encoding E2-EPF, and that
CC   inhibits the expression of E2-EPF. The compound, composition and methods
CC   are useful for treating a disease or condition associated with E2-EPF,
CC   such as an autoimmune disease, preferably a skin disease such as
CC   pemphigus foliaceus. They are also useful in research and diagnostics for
CC   modulating the expression of E2-EPF. The present sequence represents a
CC   human E2-EPF target region.
XX
SQ   Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        275 CTGCTCCTGGGGAACTTCG 293
              |||||| ||| ||||| ||
Db          2 CTGCTCTTGGAGAACTACG 20


RESULT 1098
ADG72393/c
ID   ADG72393 standard; DNA; 20 BP.
XX
AC   ADG72393;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human E2-EPF antisense oligonucleotide ISIS 156921.
XX
KW   ss; E2-EPF; autoimmune disease; skin disease; pemphigus foliaceus; human;
KW   antisense.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US2003232436-A1.
XX
PD   18-DEC-2003.
XX
PF   14-JUN-2002; 2002US-00173240.
XX
PR   14-JUN-2002; 2002US-00173240.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Dobie KW;
XX
DR   WPI; 2004-052171/05.
XX
PT   New antisense oligonucleotide targeted to a nucleic acid encoding E2-EPF,
PT   useful for treating an autoimmune disease, preferably a skin disease,
PT   such as, pemphigus foliaceus.
XX
PS   Example 15; SEQ ID NO 32; 45pp; English.
XX
CC   The invention relates to a compound targeted to, and which specifically
CC   hybridises with, a nucleic acid molecule encoding E2-EPF, and that
CC   inhibits the expression of E2-EPF. The compound, composition and methods
CC   are useful for treating a disease or condition associated with E2-EPF,
CC   such as an autoimmune disease, preferably a skin disease such as
CC   pemphigus foliaceus. They are also useful in research and diagnostics for
CC   modulating the expression of E2-EPF. The present sequence represents a
CC   human E2-EPF antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1080 CAATGAGGTGGTGACACTG 1098
              ||| |||||| |||||||
Db         19 CAAGGAGGTGACGACACTG 1


RESULT 1099
ADG72427
ID   ADG72427 standard; DNA; 20 BP.
XX
AC   ADG72427;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human E2-EPF target region ISIS 72344.
XX
KW   ss; E2-EPF; autoimmune disease; skin disease; pemphigus foliaceus; human.
XX
OS   Homo sapiens.
XX
PN   US2003232436-A1.
XX
PD   18-DEC-2003.
XX
PF   14-JUN-2002; 2002US-00173240.
XX
PR   14-JUN-2002; 2002US-00173240.
```

```
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Dobie KW;
XX
DR   WPI; 2004-052171/05.
XX
PT   New antisense oligonucleotide targeted to a nucleic acid encoding E2-EPF,
PT   useful for treating an autoimmune disease, preferably a skin disease,
PT   such as, pemphigus foliaceus.
XX
PS   Example 15; SEQ ID NO 66; 45pp; English.
XX
CC   The invention relates to a compound targeted to, and which specifically
CC   hybridises with, a nucleic acid molecule encoding E2-EPF, and that
CC   inhibits the expression of E2-EPF. The compound, composition and methods
CC   are useful for treating a disease or condition associated with E2-EPF,
CC   such as an autoimmune disease, preferably a skin disease such as
CC   pemphigus foliaceus. They are also useful in research and diagnostics for
CC   modulating the expression of E2-EPF. The present sequence represents a
CC   human E2-EPF target region.
XX
SQ   Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1080 CAATGAGGTGGTGACACTG 1098
              ||| ||||||  |||||||
Db          2 CAAGGAGGTGACGACACTG 20


RESULT 1100
ADG87026
ID   ADG87026 standard; cDNA; 20 BP.
XX
AC   ADG87026;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Mouse PPAR antisense oligonucleotoide target sequence #22.
XX
KW   Mouse; ss; PPAR delta; peroxisome proliferative activated receptor delta;
KW   antisense gene therapy; cytostatic; osteopathic; antidiabetic; cancer;
KW   osteoporosis; diabetes; endocrine disorder.
XX
OS   Mus musculus.
XX
PN   US2003224514-A1.
XX
PD   04-DEC-2003.
XX
PF   31-MAY-2002; 2002US-00160807.
XX
PR   31-MAY-2002; 2002US-00160807.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Gaarde W,  Freier SM,  Watt AT;
XX
DR   WPI; 2004-022078/02.
XX
PT   New antisense oligonucleotides of 8-80 nucleobases, useful for treating
PT   cancer, diabetes, osteoporosis or various endocrine disorders.
XX
PS   Example 16; SEQ ID NO 262; 155pp; English.
XX
CC   The invention relates to an antisense oligonucleotide comprising 8-80
CC   nucleobases in length targeted to the coding region of a nucleic acid
CC   molecule encoding PPAR-delta (peroxisome proliferative activated receptor
CC   delta), where the antisense compound inhibits the expression of the PPAR-
CC   delta and has any of the 66 sequences of 20 amino acids fully defined in
CC   the specification. Also included are a compound of 8-80 nucleobases in
CC   length that specifically hybridises with at least an 8-nucleobase portion
CC   of a preferred target region on a nucleic acid molecule encoding PPAR-
CC   delta and a composition comprising the antisense oligonucleotide and a
CC   carrier. The antisense oligonucleotide comprises at least one modified
CC   internucleoside linkage (preferably a phosphorothioate linkage), at least
CC   one sugar moiety (preferably 2'-O-methoxyethyl moiety) and at least one
CC   modified nucleobase (which is a 5-methyl cytosine). The antisense
CC   compounds are useful for treating cancer, osteoporosis, diabetes or
CC   various endocrine disorders. The Human PPAR delta gene is located on
CC   chromosome 6p21. The present sequence is a mouse PPAR delta cDNA target
CC   sequence for the antisense oligonucleotides of the invention.
XX
SQ   Sequence 20 BP; 3 A; 3 C; 9 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        344 TGAAGATGGGGTCTGATGG 362
              || ||||||| | ||||||
Db          2 TGCAGATGGGCTGTGATGG 20


RESULT 1101
ADG86888/c
ID   ADG86888 standard; DNA; 20 BP.
XX
AC   ADG86888;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Mouse PPAR antisense oligonucleotide ISIS 221095.
XX
KW   Mouse; ss; PPAR delta; peroxisome proliferative activated receptor delta;
KW   antisense gene therapy; cytostatic; osteopathic; antidiabetic; cancer;
KW   osteoporosis; diabetes; endocrine disorder.
XX
OS   Mus musculus.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages and all cytidines are 5
FT                   -methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl residue"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl residue"
XX
PN   US2003224514-A1.
XX
PD   04-DEC-2003.
XX
PF   31-MAY-2002; 2002US-00160807.
XX
PR   31-MAY-2002; 2002US-00160807.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Gaarde W,  Freier SM,  Watt AT;
XX
DR   WPI; 2004-022078/02.
XX
PT   New antisense oligonucleotides of 8-80 nucleobases, useful for treating
PT   cancer, diabetes, osteoporosis or various endocrine disorders.
XX
PS   Example 16; SEQ ID NO 124; 155pp; English.
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```
XX
CC   The invention relates to an antisense oligonucleotide comprising 8-80
CC   nucleobases in length targeted to the coding region of a nucleic acid
CC   molecule encoding PPAR-delta (peroxisome proliferative activated receptor
CC   delta), where the antisense compound inhibits the expression of the PPAR-
CC   delta and has any of the 66 sequences of 20 amino acids fully defined in
CC   the specification. Also included are a compound of 8-80 nucleobases in
CC   length that specifically hybridises with at least an 8-nucleobase portion
CC   of a preferred target region on a nucleic acid molecule encoding PPAR-
CC   delta and a composition comprising the antisense oligonucleotide and a
CC   carrier. The antisense oligonucleotide comprises at least one modified
CC   internucleoside linkage (preferably a phosphorothioate linkage), at least
CC   one sugar moiety (preferably 2'-O-methoxyethyl moiety) and at least one
CC   modified nucleobase (which is a 5-methyl cytosine). The antisense
CC   compounds are useful for treating cancer, osteoporosis, diabetes or
CC   various endocrine disorders. The Human PPAR delta gene is located on
CC   chromosome 6p21. The present sequence is an antisense oligonucleotide of
CC   the invention targeting mouse PPAR delta.
XX
SQ   Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        344 TGAAGATGGGGTCTGATGG 362
              || ||||||| | ||||||
Db         19 TGCAGATGGGCTGTGATGG 1


RESULT 1102
ADH18431/c
ID   ADH18431 standard; DNA; 20 BP.
XX
AC   ADH18431;
XX
DT   11-MAR-2004  (first entry)
XX
DE   2'-MOE gapmer antisense oligo targeted to human ApoB DNA 3 - SEQ ID 420.
XX
KW   apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW   anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW   diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW   antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW   human; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003097662-A1.
XX
PD   27-NOV-2003.
XX
PF   15-MAY-2003; 2003WO-US015493.
XX
PR   15-MAY-2002; 2002US-00147196.
PR   13-NOV-2002; 2002US-0426324P.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke RM,  Graham MJ;
XX
DR   WPI; 2004-022840/02.
XX
PT   New antisense compound, useful for preparing a composition for treating
PT   abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT   2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS   Claim 1; SEQ ID NO 420; 405pp; English.
XX
CC   The invention relates to a novel antisense compound targeted to a nucleic
CC   acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC   hybridises with and inhibits the expression of human apolipoprotein B.
CC   The compound of the invention demonstrates antiarteriosclerotic,
CC   cardiant, antidiabetic and anorectic activities and may be useful for
CC   preparing a composition for treating abnormal lipid or cholesterol
CC   metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC   cardiovascular disease. Furthermore, the compound has gene therapy
CC   applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC   MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC   phosphorothioate backbone throughout and in which all cytidine residues
CC   are 5-methylcytidines.
XX
SQ   Sequence 20 BP; 9 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        583 CTATCTGAGATTGGCTTTG 601
              || ||| ||||||||||  |
Db         19 CTTTCTCAGATTGGCTTGG 1


RESULT 1103
ADH18528
ID   ADH18528 standard; DNA; 20 BP.
XX
AC   ADH18528;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human apolipoprotein B antisense inhibition target DNA - SEQ ID 517.
XX
KW   apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW   anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW   diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW   antisense inhibition target; human; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003097662-A1.
XX
PD   27-NOV-2003.
XX
PF   15-MAY-2003; 2003WO-US015493.
XX
PR   15-MAY-2002; 2002US-00147196.
PR   13-NOV-2002; 2002US-0426324P.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke RM,  Graham MJ;
XX
DR   WPI; 2004-022840/02.
XX
PT   New antisense compound, useful for preparing a composition for treating
PT   abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT   2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS   Claim 1; SEQ ID NO 517; 405pp; English.
XX
CC   The invention relates to a novel antisense compound targeted to a nucleic
CC   acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC   hybridises with and inhibits the expression of human apolipoprotein B.
CC   The compound of the invention demonstrates antiarteriosclerotic,
CC   cardiant, antidiabetic and anorectic activities and may be useful for
CC   preparing a composition for treating abnormal lipid or cholesterol
CC   metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC   cardiovascular disease. Furthermore, the compound has gene therapy
CC   applications. The current sequence is that of the human ApoB antisense
CC   inhibition target DNA of the invention.
XX
SQ   Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
```

```
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1012 AGGGGAGAGCTCAAGCTGG 1030
              ||| |||||||||||||||
Db          2 AGGTATGAGCTCAAGCTGG 20


RESULT 1104
ADH18139/c
ID   ADH18139 standard; DNA; 20 BP.
XX
AC   ADH18139;
XX
DT   11-MAR-2004  (first entry)
XX
DE   2'-MOE gapmer antisense oligo targeted to human ApoB DNA 1 - SEQ ID 128.
XX
KW   apolipoprotein B; ApoB; antiarteriosclerotic; cardiant; antidiabetic;
KW   anorectic; lipid; cholesterol metabolism; atherosclerosis;
KW   diabetes Type 2; obesity; hyperlipidaemia; cardiovascular; gene therapy;
KW   antisense; 2'-O-methoxyethyl gapmer; phosphorothioate backbone; 2'-MOE;
KW   human; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003097662-A1.
XX
PD   27-NOV-2003.
XX
PF   15-MAY-2003; 2003WO-US015493.
XX
PR   15-MAY-2002; 2002US-00147196.
PR   13-NOV-2002; 2002US-0426324P.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke RM,  Graham MJ;
XX
DR   WPI; 2004-022840/02.
XX
PT   New antisense compound, useful for preparing a composition for treating
PT   abnormal lipid or cholesterol metabolism, atherosclerosis, diabetes Type
PT   2, obesity, hyperlipidemia or cardiovascular disease.
XX
PS   Claim 1; SEQ ID NO 128; 405pp; English.
XX
CC   The invention relates to a novel antisense compound targeted to a nucleic
CC   acid molecule encoding human apolipoprotein B (ApoB) which specifically
CC   hybridises with and inhibits the expression of human apolipoprotein B.
CC   The compound of the invention demonstrates antiarteriosclerotic,
CC   cardiant, antidiabetic and anorectic activities and may be useful for
CC   preparing a composition for treating abnormal lipid or cholesterol
CC   metabolism, atherosclerosis, diabetes Type 2, obesity, hyperlipidaemia or
CC   cardiovascular disease. Furthermore, the compound has gene therapy
CC   applications. The current sequence is that of the 2'-O-methoxyethyl (2'-
CC   MOE) gapmer antisense oligo of the invention which has 2'-MOE 'wings', a
CC   phosphorothioate backbone throughout and in which all cytidine residues
CC   are 5-methylcytidines.
XX
SQ   Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1012 AGGGGAGAGCTCAAGCTGG 1030
              ||| |||||||||||||||
Db         19 AGGTATGAGCTCAAGCTGG 1


RESULT 1105
ADH48222
ID   ADH48222 standard; DNA; 20 BP.
XX
AC   ADH48222;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human GRK6 DNA, antisense oligonucleotide #14.
XX
KW   Antisense therapy; human; G protein-coupled receptor kinase 6;
KW   GPCR kinase 6; GRK6; rheumatoid arthritis; drug addiction;
KW   uterine contractility; hypertension; aberrant haematopoiesis;
KW   antiinflammatory; antiarthritic; antirheumatic; hypotensive;
KW   phosphorothioate; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "This oligonucleotide has a phosphorothioate
FT                   backbone and 2'-methyoxyethyl (2'-MOE) wings at the 5'
FT                   and 3' ends, which are 5 nucleotides in length at each
FT                   end. All cytidine residues are 5-methylcytidines"
XX
PN   US2003228689-A1.
XX
PD   11-DEC-2003.
XX
PF   31-MAY-2002; 2002US-00159856.
XX
PR   31-MAY-2002; 2002US-00159856.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Freier SM,  Dobie KW;
XX
DR   WPI; 2004-052027/05.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6, useful
PT   for treating diabetes, drug addiction, uterine contractility and
PT   hypertension.
XX
PS   Example 15; SEQ ID NO 24; 58pp; English.
XX
CC   The present invention relates to antisense compounds targeted to a
CC   nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6 (GRK6).
CC   The antisense compound comprises an antisense oligonucleotide that
CC   specifically hybridises with the nucleic acid and inhibits the expression
CC   of GRK6. The antisense oligonucleotide is a chimeric oligonucleotide. The
CC   antisense oligonucleotide comprises at least one modified internucleoside
CC   linkage, preferably a phosphorothioate linkage. It also comprises at
CC   least one modified sugar moiety, preferably a 2'-O-methoxyethyl (2'-MOE)
CC   sugar moiety. The antisense oligonucleotide further comprises at least
CC   one modified nucleobase, preferably a 5-methylcytosine. The antisense
CC   oligonucleotides are useful for the treatment of diseases such as
CC   rheumatoid arthritis, drug addiction, uterine contractility,
CC   hypertension, and diseases or conditions arising from aberrant
CC   haematopoiesis. The present sequence represents an antisense
CC   oligonucleotide used in the examples of the present invention.
XX
SQ   Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        843 TGAGTACCTGGACAAGGAC 861
              ||||| |||||| |||| |
Db          1 TGAGTTCCTGGAAAAGGTC 19


RESULT 1106
```

```
ADH63304/c
ID   ADH63304 standard; DNA; 20 BP.
XX
AC   ADH63304;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human glucocorticoid receptor-specific antisense oligonucleotide #138.
XX
KW   antisense oligonucleotide; glucocorticoid receptor; infection;
KW   inflammation; tumour formation; diabetes; obesity;
KW   cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW   phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS   Homo sapiens.
XX
PN   WO2003099215-A2.
XX
PD   04-DEC-2003.
XX
PF   20-MAY-2003; 2003WO-US016084.
XX
PR   20-MAY-2002; 2002US-0381857P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Crosby SD,  Nalseth AE;
XX
DR   WPI; 2004-035034/03.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT   cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS   Claim 4; SEQ ID NO 138; 985pp; English.
XX
CC   The invention comprises an antisense oligonucleotides that are targeted
CC   to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC   antisense oligonucleotides of the invention are useful for preventing or
CC   delaying infection, inflammation or tumour formation. The antisense
CC   oligonucleotides are also useful for treating diabetes, obesity,
CC   cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC   present DNA sequence represents an antisense oligonucleotide that targets
CC   the human glucocorticoid receptor gene. NOTE: The present sequence
CC   contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 2 A; 6 C; 3 G; 9 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        621 TAAGCTGGACAAACTGGGC 639
              |||||  || |||||||||
Db         20 TAAGCAAGAGAAACTGGGC 2


RESULT 1107
ADH65163/c
ID   ADH65163 standard; DNA; 20 BP.
XX
AC   ADH65163;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human glucocorticoid receptor-specific antisense oligonucleotide #1997.
XX
KW   antisense oligonucleotide; glucocorticoid receptor; infection;
KW   inflammation; tumour formation; diabetes; obesity;
KW   cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW   phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS   Homo sapiens.
XX
PN   WO2003099215-A2.
XX
PD   04-DEC-2003.
XX
PF   20-MAY-2003; 2003WO-US016084.
XX
PR   20-MAY-2002; 2002US-0381857P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Crosby SD,  Nalseth AE;
XX
DR   WPI; 2004-035034/03.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT   cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS   Claim 4; SEQ ID NO 1997; 985pp; English.
XX
CC   The invention comprises an antisense oligonucleotides that are targeted
CC   to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC   antisense oligonucleotides of the invention are useful for preventing or
CC   delaying infection, inflammation or tumour formation. The antisense
CC   oligonucleotides are also useful for treating diabetes, obesity,
CC   cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC   present DNA sequence represents an antisense oligonucleotide that targets
CC   the human glucocorticoid receptor gene. NOTE: The present sequence
CC   contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 3 A; 5 C; 2 G; 10 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        619 ATTAAGCTGGACAAACTGG 637
              |||||||  || |||||||
Db         19 ATTAAGCAAGAGAAACTGG 1


RESULT 1108
ADH67403/c
ID   ADH67403 standard; DNA; 20 BP.
XX
AC   ADH67403;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human glucocorticoid receptor-specific antisense oligonucleotide #4237.
XX
KW   antisense oligonucleotide; glucocorticoid receptor; infection;
KW   inflammation; tumour formation; diabetes; obesity;
KW   cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW   phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS   Homo sapiens.
XX
PN   WO2003099215-A2.
XX
PD   04-DEC-2003.
XX
PF   20-MAY-2003; 2003WO-US016084.
XX
PR   20-MAY-2002; 2002US-0381857P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Crosby SD,  Nalseth AE;
XX
DR   WPI; 2004-035034/03.
XX
```

```
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT   cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS   Claim 4; SEQ ID NO 4237; 985pp; English.
XX
CC   The invention comprises an antisense oligonucleotides that are targeted
CC   to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC   antisense oligonucleotides of the invention are useful for preventing or
CC   delaying infection, inflammation or tumour formation. The antisense
CC   oligonucleotides are also useful for treating diabetes, obesity,
CC   cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC   present DNA sequence represents an antisense oligonucleotide that targets
CC   the human glucocorticoid receptor gene. NOTE: The present sequence
CC   contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         49 CCAGCAGTGTGACTGCTGA 67
              ||||||||||  |||| |
Db         20 CCAGCAGTGTGCTTGCTCA 2


RESULT 1109
ADH67245/c
ID   ADH67245 standard; DNA; 20 BP.
XX
AC   ADH67245;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human glucocorticoid receptor-specific antisense oligonucleotide #4079.
XX
KW   antisense oligonucleotide; glucocorticoid receptor; infection;
KW   inflammation; tumour formation; diabetes; obesity;
KW   cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW   phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS   Homo sapiens.
XX
PN   WO2003099215-A2.
XX
PD   04-DEC-2003.
XX
PF   20-MAY-2003; 2003WO-US016084.
XX
PR   20-MAY-2002; 2002US-0381857P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Crosby SD,  Nalseth AE;
XX
DR   WPI; 2004-035034/03.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT   cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS   Claim 4; SEQ ID NO 4079; 985pp; English.
XX
CC   The invention comprises an antisense oligonucleotides that are targeted
CC   to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC   antisense oligonucleotides of the invention are useful for preventing or
CC   delaying infection, inflammation or tumour formation. The antisense
CC   oligonucleotides are also useful for treating diabetes, obesity,
CC   cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC   present DNA sequence represents an antisense oligonucleotide that targets
CC   the human glucocorticoid receptor gene. NOTE: The present sequence
CC   contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         49 CCAGCAGTGTGACTGCTGA 67
              ||||||||||  |||| |
Db         19 CCAGCAGTGTGCTTGCTCA 1


RESULT 1110
ADH54704/c
ID   ADH54704 standard; DNA; 20 BP.
XX
AC   ADH54704;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human VEGF-C PCR primer #1.
XX
KW   human; ss; PCR; VEGF-C; cardiovascular disorder; atherosclerosis;
KW   diabetic retinopathy; autoimmune disorder; inflammatory disorder;
KW   vascular endothelial growth factor; primer.
XX
OS   Homo sapiens.
XX
PN   US2003232437-A1.
XX
PD   18-DEC-2003.
XX
PF   17-JUN-2002; 2002US-00173718.
XX
PR   17-JUN-2002; 2002US-00173718.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Zhang H,  Dobie KW;
XX
DR   WPI; 2004-061284/06.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding vascular endothelial growth factor-C (VEGF-C),
PT   useful for treating atherosclerosis, diabetic retinopathy, or
PT   inflammatory disorders.
XX
PS   Example 13; SEQ ID NO 5; 83pp; English.
XX
CC   The invention relates to a compound targeted to and which specifically
CC   hybridises with a nucleic acid molecule encoding VEGF-C, and inhibits the
CC   expression of VEGF-C. The compound, composition and methods are useful
CC   for treating a disease or condition associated with VEGF-C, such as a
CC   cardiovascular disorder e.g. atherosclerosis or diabetic retinopathy or
CC   an autoimmune or inflammatory disorder. They are also useful in research
CC   and diagnostics for modulating the expression of VEGF-C. The present
CC   sequence represents a human VEGF-C PCR primer.
XX
SQ   Sequence 20 BP; 7 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1553 GGTCTTCGTCGATGCCTGA 1571
              ||||||  ||| |||||||
Db         19 GGTCTTGTTCGCTGCCTGA 1


RESULT 1111
ADH50654
ID   ADH50654 standard; DNA; 20 BP.
XX
```

```
AC   ADH50654;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human IRAK-1 DNA, antisense oligonucleotide #48.
XX
KW   Antisense therapy; human; interleukin-1 receptor-associated kinase-1;
KW   IL-1 receptor-associated kinase-1; IRAK-1;
KW   hyperproliferative disorder e.g.; cancer; autoimmune disorder;
KW   altered bone metabolism or inflammation; cytostatic; immunosuppressive;
KW   osteopathic; antiinflammatory; phosphorothioate; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "This oligonucleotide has a phosphorothioate
FT                    backbone and 2'-methyoxyethyl (2'-MOE) wings at the 5'
FT                    and 3' ends, which are 5 nucleotides in length at each
FT                    end. All cytidine residues are 5-methylcytidines"
XX
PN   US2003228690-A1.
XX
PD   11-DEC-2003.
XX
PF   10-JUN-2002; 2002US-00167034.
XX
PR   10-JUN-2002; 2002US-00167034.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Baker BF,  Freier SM,  Dobie KW;
XX
DR   WPI; 2004-052028/05.
XX
PT   New compound having a sequence targeted to a nucleic acid encoding IL-1
PT   receptor-associated kinase-1, useful for preparing a composition for
PT   treating hyperproliferative or autoimmune disorder or inflammation.
XX
PS   Example 15; SEQ ID NO 61; 66pp; English.
XX
CC   The present invention relates to antisense compounds targeted to a
CC   nucleic acid encoding interleukin-1 (IL-1) receptor-associated kinase-1
CC   (IRAK-1). The antisense compound comprises an antisense oligonucleotide
CC   that specifically hybridises with the nucleic acid and inhibits the
CC   expression of IRAK-1. The antisense oligonucleotide is a chimeric
CC   oligonucleotide. The antisense oligonucleotide comprises at least one
CC   modified internucleoside linkage, preferably a phosphorothioate linkage.
CC   It also comprises at least one modified sugar moiety, preferably a 2'-O-
CC   methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further
CC   comprises at least one modified nucleobase, preferably a 5-
CC   methylcytosine. The antisense oligonucleotides are useful for the
CC   treatment of diseases such as hyperproliferative disorders, e.g. cancer,
CC   autoimmune disorders, altered bone metabolism, and inflammation. The
CC   present sequence represents an antisense oligonucleotide used in the
CC   examples of the present invention.
XX
SQ   Sequence 20 BP; 1 A; 7 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        928 CAGCTGCTCCGTGGCCTGG 946
              ||||||||| |  ||||||
Db          2 CAGCTGCTCTGCTGCCTGG 20


RESULT 1112
ADH50720/c
ID   ADH50720 standard; DNA; 20 BP.
XX
AC   ADH50720;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human IRAK-1 DNA target sequence #42.
XX
KW   Antisense therapy; human; interleukin-1 receptor-associated kinase-1;
KW   IL-1 receptor-associated kinase-1; IRAK-1;
KW   hyperproliferative disorder e.g.; cancer; autoimmune disorder;
KW   altered bone metabolism or inflammation; cytostatic; immunosuppressive;
KW   osteopathic; antiinflammatory; ds.
XX
OS   Homo sapiens.
XX
PN   US2003228690-A1.
XX
PD   11-DEC-2003.
XX
PF   10-JUN-2002; 2002US-00167034.
XX
PR   10-JUN-2002; 2002US-00167034.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Baker BF,  Freier SM,  Dobie KW;
XX
DR   WPI; 2004-052028/05.
XX
PT   New compound having a sequence targeted to a nucleic acid encoding IL-1
PT   receptor-associated kinase-1, useful for preparing a composition for
PT   treating hyperproliferative or autoimmune disorder or inflammation.
XX
PS   Example 15; SEQ ID NO 127; 66pp; English.
XX
CC   The present invention relates to antisense compounds targeted to a
CC   nucleic acid encoding interleukin-1 (IL-1) receptor-associated kinase-1
CC   (IRAK-1). The antisense compound comprises an antisense oligonucleotide
CC   that specifically hybridises with the nucleic acid and inhibits the
CC   expression of IRAK-1. The antisense oligonucleotide is a chimeric
CC   oligonucleotide. The antisense oligonucleotide comprises at least one
CC   modified internucleoside linkage, preferably a phosphorothioate linkage.
CC   It also comprises at least one modified sugar moiety, preferably a 2'-O-
CC   methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further
CC   comprises at least one modified nucleobase, preferably a 5-
CC   methylcytosine. The antisense oligonucleotides are useful for the
CC   treatment of diseases such as hyperproliferative disorders, e.g. cancer,
CC   autoimmune disorders, altered bone metabolism, and inflammation. The
CC   present sequence represents a human IRAK-1 DNA target sequence for an
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        928 CAGCTGCTCCGTGGCCTGG 946
              ||||||||| |  ||||||
Db         19 CAGCTGCTCTGCTGCCTGG 1


RESULT 1113
ADH61956
ID   ADH61956 standard; DNA; 20 BP.
XX
AC   ADH61956;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Panellus stypticus rDNA PCR primer ITS 2, SEQ ID 2.
XX
KW   Basidiomycete; dioxin; ribosomal DNA; PCR; primer; ss.
```

```
XX
OS   Panellus stypticus.
XX
PN   JP2003250520-A.
XX
PD   09-SEP-2003.
XX
PF   01-MAR-2002; 2002JP-00055681.
XX
PR   01-MAR-2002; 2002JP-00055681.
XX
PA   (SAOC ) MERCIAN CORP.
PA   (DOKU-) DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO.
XX
DR   WPI; 2004-172258/17.
XX
PT   Degrading dioxin by using basidiomycete such as Panellus stypticus having
PT   dioxin degrading activity.
XX
PS   Example 3; SEQ ID NO 2; 11pp; Japanese.
XX
CC   The present invenion relates to a method (M1) for decomposing dioxin by
CC   using decomposable basidiomycetes (Panellus stypticus). In (M1), the
CC   basidiomycete is cultured in a first culture medium containing dioxin and
CC   in a second culture medium not containing dioxin. The dioxin is added to
CC   the second culture medium such that its concentration becomes equal to
CC   the initial-stage concentration of the first culture medium. A reagent
CC   destroying microbial cells is added to the culture medium after the
CC   culture completion. The microbial cells are lysed and the residual dioxin
CC   concentration of both the culture mediums are compared. The basidiomycete
CC   having the dioxin degrading activity is selected by screening, which
CC   involves selecting the microorganisms in which the residual dioxin
CC   concentration of the first culture medium is less than the residual
CC   dioxin concentration of the second culture medium. ADH61959-ADH61961 are
CC   ribosomal DNAs from Panellus stypticus used to determine the genus of the
CC   basidiomycetes used in the method of the invention. ADH61955-ADH61958 are
CC   PCR primers used to amplify the rDNA sequences in an example from the
CC   invention.
XX
SQ   Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1549 CTTCGGTCTTCGTCGATGC 1567
              || || ||||| |||||||
Db          2 CTGCGTTCTTCATCGATGC 20


RESULT 1114
ADH61957/c
ID   ADH61957 standard; DNA; 20 BP.
XX
AC   ADH61957;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Panellus stypticus rDNA PCR primer ITS 3, SEQ ID 3.
XX
KW   Basidiomycete; dioxin; ribosomal DNA; PCR; primer; ss.
XX
OS   Panellus stypticus.
XX
PN   JP2003250520-A.
XX
PD   09-SEP-2003.
XX
PF   01-MAR-2002; 2002JP-00055681.
XX
PR   01-MAR-2002; 2002JP-00055681.
XX
PA   (SAOC ) MERCIAN CORP.
PA   (DOKU-) DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO.
XX
DR   WPI; 2004-172258/17.
XX
PT   Degrading dioxin by using basidiomycete such as Panellus stypticus having
PT   dioxin degrading activity.
XX
PS   Example 3; SEQ ID NO 3; 11pp; Japanese.
XX
CC   The present invenion relates to a method (M1) for decomposing dioxin by
CC   using decomposable basidiomycetes (Panellus stypticus). In (M1), the
CC   basidiomycete is cultured in a first culture medium containing dioxin and
CC   in a second culture medium not containing dioxin. The dioxin is added to
CC   the second culture medium such that its concentration becomes equal to
CC   the initial-stage concentration of the first culture medium. A reagent
CC   destroying microbial cells is added to the culture medium after the
CC   culture completion. The microbial cells are lysed and the residual dioxin
CC   concentration of both the culture mediums are compared. The basidiomycete
CC   having the dioxin degrading activity is selected by screening, which
CC   involves selecting the microorganisms in which the residual dioxin
CC   concentration of the first culture medium is less than the residual
CC   dioxin concentration of the second culture medium. ADH61959-ADH61961 are
CC   ribosomal DNAs from Panellus stypticus used to determine the genus of the
CC   basidiomycetes used in the method of the invention. ADH61955-ADH61958 are
CC   PCR primers used to amplify the rDNA sequences in an example from the
CC   invention.
XX
SQ   Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1549 CTTCGGTCTTCGTCGATGC 1567
              || || ||||| |||||||
Db          19 CTGCGTTCTTCATCGATGC 1


RESULT 1115
ADI15592
ID   ADI15592 standard; DNA; 20 BP.
XX
AC   ADI15592;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human phosphodiesterase 4D antisense oligonucleotide #18.
XX
KW   cytostatic; cardiant; antiinflammatory; antimicrobial; antisense therapy;
KW   phosphodiesterase inhibitor 4D; phosphodiesterase 4D; cancer;
KW   cardiovascular disease; inflammation; infection; inflammation;
KW   tumour formation; antisense technology; human; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2003220273-A1.
XX
PD   27-NOV-2003.
```

```
XX
PF   15-MAY-2002; 2002US-00146860.
XX
PR   15-MAY-2002; 2002US-00146860.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Dobie KW,  Roach MP;
XX
DR   WPI; 2004-060214/06.
XX
PT   New antisense compounds targeted to nucleic acid molecules encoding
PT   phosphodiesterase 4D, useful for treating diseases associated with
PT   expression of phosphodiesterase 4D, e.g. cancer, cardiovascular disease
PT   or inflammation.
XX
PS   Example 15; SEQ ID NO 46; 72pp; English.
XX
CC   The invention describes a compound 8-80 nucleobases in length targeted to
CC   a nucleic acid molecule encoding phosphodiesterase 4D. The compound
CC   specifically hybridises with the nucleic acid molecule encoding
CC   phosphodiesterase 4D and inhibits the expression of phosphodiesterase 4D,
CC   or specifically hybridises with at least an 8-nucleobase portion of an
CC   active site on a nucleic acid molecule encoding phosphodiesterase 4D. The
CC   antisense oligonucleotides and compounds are useful for modulating the
CC   expression of phosphodiesterase 4D, and for treating diseases or
CC   conditions associated with expression of phosphodiesterase 4D, e.g.
CC   cancer, cardiovascular disease or inflammation. The antisense compounds
CC   are also useful as research reagents and kits, or in diagnostic,
CC   therapeutic and prophylaxis applications, e.g. to prevent or delay
CC   infection, inflammation or tumour formation. This sequence represents a
CC   human phosphodiesterase 4D antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 6 C; 7 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        501 GCCTGAGGGCTACCTGGAG 519
              |||| |||||||||  |||
Db          2 GCCTCAGGGCTACCGAGAG 20


RESULT 1116
ADI26921/c
ID   ADI26921 standard; DNA; 20 BP.
XX
AC   ADI26921;
XX
DT   22-APR-2004  (first entry)
XX
DE   Cyclin dependent kinase 4 antisense oligonucleotide #87.
XX
KW   cytostatic; antidiabetic; antiinfertility; gene therapy;
KW   cyclin-dependent kinase 4; diabetes; infertility;
KW   hyperproliferative disorder; cancer; antisense technology; human; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                    are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    15. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004005567-A1.
XX
PD   08-JAN-2004.
XX
PF   02-JUL-2002; 2002US-00188779.
XX
PR   02-JUL-2002; 2002US-00188779.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Freier SM,  Dobie KW;
XX
DR   WPI; 2004-081710/08.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding cyclin-dependent kinase 4, useful for preparing a
PT   composition for treating diabetes, infertility or hyperproliferative
PT   disorder, e.g., cancer.
XX
PS   Example 15; SEQ ID NO 106; 90pp; English.
XX
CC   The invention describes a new antisense oligonucleotide, having a
CC   sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclin-
CC   dependent kinase 4, specifically hybridises with the nucleic acid
CC   encoding cyclin-dependent kinase 4 and inhibits expression of cyclin-
CC   dependent kinase 4. The antisense oligonucleotide is useful for preparing
CC   a composition for treating diabetes, infertility or hyperproliferative
CC   disorder, e.g., cancer. This sequence represents a human cyclin dependent
CC   kinase 4 antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        687 CAACCTTGTGGCACTCAAG 705
              | || ||||||| ||||||
Db         20 CCACTTTGTGGCCCTCAAG 2


RESULT 1117
ADI19193/c
ID   ADI19193 standard; DNA; 20 BP.
XX
AC   ADI19193;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human PCTAIRE protein kinase 2 antisense oligonucleotide #47.
XX
KW   gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW   neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                    are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    15. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
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PN US2003225256-A1.
XX
PD 04-DEC-2003.
XX
PF 31-MAY-2002; 2002US-00160787.
XX
PR 31-MAY-2002; 2002US-00160787.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Watt AT;
XX
DR WPI; 2004-022085/02.
XX
PT New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT composition for treating neurological disorders.
XX
PS Claim 1; SEQ ID NO 60; 58pp; English.
XX
CC The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC protein kinase 2, that specifically hybridises with the nucleic acid
CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC The antisense oligonucleotide is useful for preparing a composition for
CC treating e.g., neurological disorders. This sequence represents a human
CC PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ Sequence 20 BP; 4 A; 1 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 988 CCCCAGAACCTGCTCATCA 1006
|| |||||||| ||||| |
Db 19 CCACAGAACCTCCTCATTA 1

RESULT 1118
ADI19201/c
ID ADI19201 standard; DNA; 20 BP.
XX
AC ADI19201;
XX
DT 22-APR-2004 (first entry)
XX
DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #55.
XX
KW gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1. .5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15. .20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN US2003225256-A1.
XX
PD 04-DEC-2003.
XX
PF 31-MAY-2002; 2002US-00160787.
XX
PR 31-MAY-2002; 2002US-00160787.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Watt AT;
XX
DR WPI; 2004-022085/02.
XX
PT New antisense oligonucleotide, having a sequence targeted to a nucleic
PT acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT composition for treating neurological disorders.
XX
PS Claim 1; SEQ ID NO 68; 58pp; English.
XX
CC The invention describes a new antisense oligonucleotide, having a
CC sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC protein kinase 2, that specifically hybridises with the nucleic acid
CC encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC The antisense oligonucleotide is useful for preparing a composition for
CC treating e.g., neurological disorders. This sequence represents a human
CC PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1256 TAGGAACCCCAACTGAGGA 1274
||||||| ||| || ||||
Db 19 TAGGAACTCCATCTCAGGA 1

RESULT 1119
ADI19261
ID ADI19261 standard; DNA; 20 BP.
XX
AC ADI19261;
XX
DT 22-APR-2004 (first entry)
XX
DE Human PCTAIRE protein kinase 2 antisense oligonucleotide #115.
XX
KW gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= Phosphorothioate backbone. All cytidines
FT are 5-methylcytidines"
FT modified_base 1. .5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT modified_base 15. .20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN US2003225256-A1.
XX
PD 04-DEC-2003.
XX
PF 31-MAY-2002; 2002US-00160787.
XX
PR 31-MAY-2002; 2002US-00160787.
XX

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PA   (ISIS-) ISIS PHARM INC.
XX
PI   Watt AT;
XX
DR   WPI; 2004-022085/02.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT   composition for treating neurological disorders.
XX
PS   Example 15; SEQ ID NO 128; 58pp; English.
XX
CC   The invention describes a new antisense oligonucleotide, having a
CC   sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC   protein kinase 2, that specifically hybridises with the nucleic acid
CC   encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC   The antisense oligonucleotide is useful for preparing a composition for
CC   treating e.g., neurological disorders. This sequence represents a human
CC   PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1256 TAGGAACCCCAACTGAGGA 1274
              ||||||| ||| || ||||
Db          2 TAGGAACTCCATCTCAGGA 20


RESULT 1120
ADI19259
ID   ADI19259 standard; DNA; 20 BP.
XX
AC   ADI19259;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human PCTAIRE protein kinase 2 antisense oligonucleotide #113.
XX
KW   gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW   neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2003225256-A1.
XX
PD   04-DEC-2003.
XX
PF   31-MAY-2002; 2002US-00160787.
XX
PR   31-MAY-2002; 2002US-00160787.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Watt AT;
XX
DR   WPI; 2004-022085/02.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT   composition for treating neurological disorders.
XX
PS   Example 15; SEQ ID NO 126; 58pp; English.
XX
CC   The invention describes a new antisense oligonucleotide, having a
CC   sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC   protein kinase 2, that specifically hybridises with the nucleic acid
CC   encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC   The antisense oligonucleotide is useful for preparing a composition for
CC   treating e.g., neurological disorders. This sequence represents a human
CC   PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1172 GCATCTTCTATGAGATGGC 1190
              |||| |||| ||| |||||
Db          1 GCATTTTCTTTGAAATGGC 19


RESULT 1121
ADI19198/c
ID   ADI19198 standard; DNA; 20 BP.
XX
AC   ADI19198;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human PCTAIRE protein kinase 2 antisense oligonucleotide #52.
XX
KW   gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW   neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2003225256-A1.
XX
PD   04-DEC-2003.
XX
PF   31-MAY-2002; 2002US-00160787.
XX
PR   31-MAY-2002; 2002US-00160787.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Watt AT;
XX
DR   WPI; 2004-022085/02.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding PCTAIRE protein kinase 2, useful for preparing a
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```
PT   composition for treating neurological disorders.
XX
PS   Claim 1; SEQ ID NO 65; 58pp; English.
XX
CC   The invention describes a new antisense oligonucleotide, having a
CC   sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC   protein kinase 2, that specifically hybridises with the nucleic acid
CC   encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC   The antisense oligonucleotide is useful for preparing a composition for
CC   treating e.g., neurological disorders. This sequence represents a human
CC   PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 9 A; 4 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1172 GCATCTTCTATGAGATGGC 1190
                ||||  ||||  |||  |||||
Db         20 GCATTTTCTTTGAAATGGC 2


RESULT 1122
ADI19255
ID   ADI19255 standard; DNA; 20 BP.
XX
AC   ADI19255;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human PCTAIRE protein kinase 2 antisense oligonucleotide #109.
XX
KW   gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW   neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2003225256-A1.
XX
PD   04-DEC-2003.
XX
PF   31-MAY-2002; 2002US-00160787.
XX
PR   31-MAY-2002; 2002US-00160787.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Watt AT;
XX
DR   WPI; 2004-022085/02.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT   composition for treating neurological disorders.
XX
PS   Example 15; SEQ ID NO 122; 58pp; English.
XX
CC   The invention describes a new antisense oligonucleotide, having a
CC   sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC   protein kinase 2, that specifically hybridises with the nucleic acid
CC   encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC   The antisense oligonucleotide is useful for preparing a composition for
CC   treating e.g., neurological disorders. This sequence represents a human
CC   PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 7 A; 8 C; 1 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        988 CCCCAGAACCTGCTCATCA 1006
                || ||||||| |||||  |
Db          2 CCACAGAACCTCCTCATTA 20


RESULT 1123
ADK00650/c
ID   ADK00650 standard; DNA; 20 BP.
XX
AC   ADK00650;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Primer of the invention #27.
XX
KW   cancer; Cytostatic; cancer; ds; HOMO; ss; primer.
XX
OS   Synthetic.
XX
PN   WO2004014946-A1.
XX
PD   19-FEB-2004.
XX
PF   07-AUG-2003; 2003WO-CN000639.
XX
PR   07-AUG-2002; 2002CN-00136400.
PR   16-SEP-2002; 2002CN-00137000.
PR   16-SEP-2002; 2002CN-00137009.
PR   20-NOV-2002; 2002CN-00145435.
XX
PA   (NEWO-) NEWORGEN LTD.
XX
PI   Yang S,  Gu J;
XX
DR   WPI; 2004-191733/18.
XX
PT   Novel human protein with cancer-suppressing function, encoded
PT   polynucleotide and antagonist, applicable in diagnosis and treatment of
PT   various diseases e.g. cancer.
XX
PS   Example 1; SEQ ID NO 73; 80pp; Chinese.
XX
CC   The present invention relates to an isolated human protein with cancer-
CC   suppressing function (HOMO). The protein, its encoded polynucleotide and
CC   antagonist are applicable in diagnosis and treatment of various diseases
CC   e.g. cancer. The present sequence represents a primer of the invention.
XX
SQ   Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        963 GAAGGTGCTACACCGAGAC 981
                ||||||||||  || || |
Db         20 GAAGGTGCTACTCCAAGCC 2


RESULT 1124
```

```
ADL16005
ID   ADL16005 standard; DNA; 20 BP.
XX
AC   ADL16005;
XX
DT   06-MAY-2004  (first entry)
XX
DE   White rot fungi strain related primer, ITS-2R.
XX
KW   white rot fungi; soil; ss; primer; ITS-2R.
XX
OS   Unidentified.
XX
PN   JP2004041024-A.
XX
PD   12-FEB-2004.
XX
PF   09-JUL-2002; 2002JP-00200262.
XX
PR   09-JUL-2002; 2002JP-00200262.
XX
PA   (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
PA   (KOND/) KONDO R.
PA   (WAKA-) WAKAO KENSETSU KK.
XX
DR   WPI; 2004-242914/23.
XX
PT   Detecting specific white rot fungi strain, comprises obtaining soil,
PT   recovering DNA using elution buffer, preparing DNA sample and primer,
PT   performing amplification using DNA sample as template and detecting
PT   amplified sequence.
XX
PS   Claim 7; SEQ ID NO 3; 15pp; Japanese.
XX
CC   The invention relates to a novel method for detecting a specific white
CC   rot fungi strain from white rot fungi present in soil. The method
CC   comprises: obtaining a soil sample; recovering DNA from the soil using an
CC   elution buffer; purifying the DNA; preparing the DNA sample; determining
CC   strain specific base sequence in the genome DNA of the white rot fungi
CC   strain; preparing a primer; performing amplification using the prepared
CC   primer and the DNA sample as a template, and detecting the amplified
CC   white rot fungi strain DNA. The method enables detection of the specific
CC   white rot fungi strain from the white rot fungi present in the soil. This
CC   polynucleotide sequence represents a primer used in the exemplification
CC   of the invention.
XX
SQ   Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1549 CTTCGGTCTTCGTCGATGC 1567
             || || ||||| |||||||
Db          2 CTGCGTTCTTCATCGATGC 20


RESULT 1125
ADK23610
ID   ADK23610 standard; DNA; 20 BP.
XX
AC   ADK23610;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Fungal universal forward primer #SEQ ID 29.
XX
KW   Aspergillus; internal transcribed spacer; ITS; ITS1-V1; ITS-V2; ITS-V3;
KW   ITS-V4; ITS-V5; PCR; primer; ss.
XX
OS   Synthetic.
XX
PN   WO2003097815-A2.
XX
PD   27-NOV-2003.
XX
PF   16-MAY-2003; 2003WO-US016076.
XX
PR   17-MAY-2002; 2002US-0381463P.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Morrison CJ,  Hinrikson HP;
XX
DR   WPI; 2004-022871/02.
XX
PT   Use of internal transcribed spacer 1 nucleic acid sequences, for
PT   distinguishing species of Aspergillus from one another, or detecting the
PT   presence of an Aspergillus species or strain of a species in a biological
PT   sample.
XX
PS   Disclosure; SEQ ID NO 29; 56pp; English.
XX
CC   The invention relates to a method for distinguishing species of
CC   Aspergillus from one another, comprising detecting differences in two or
CC   more internal transcribed spacer (ITS), i.e. ITS1-V1, ITS-V2, ITS-V3, ITS
CC   -V4 and ITS-V5, nucleic acid sequences of Aspergillus. The internal
CC   transcribed spacer 1 nucleic acid sequences are useful for distinguishing
CC   species of Aspergillus from one another, or for detecting the presence of
CC   an Aspergillus species in a biological sample. In an example from the
CC   invention, a biological sample was obtained from an infected subject, and
CC   the fungus was cultured for the growth of Aspergillus, followed by
CC   isolation of fungal DNA. The universal pairs internal transcribed spacer
CC   (ITS)5 and ITS2, ITS5 and ITS4, ITS1 and ITS2, or ITS1 and ITS4 were
CC   added to the reaction mixture to amplify the fungal DNA present in the
CC   mixture. PCR products generated with the primer pairs were purified, and
CC   the purified products were sequenced on both strands using the same
CC   primers as initially used for PCR amplification. Sequencing products were
CC   purified and analysed on an automated capillary DNA sequencer. A total of
CC   46 ITS1 consensus sequences ranging in length from 142-187 nucleotides
CC   were compiled. Overall, 5 regions with significant interspecies
CC   variability in length and sequence were recognised. The current sequence
CC   represents the nucleic acid sequence of a fungal universal forward
CC   primer.
XX
SQ   Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1549 CTTCGGTCTTCGTCGATGC 1567
             || || ||||| |||||||
Db          2 CTGCGTTCTTCATCGATGC 20


RESULT 1126
ADK23613/c
ID   ADK23613 standard; DNA; 20 BP.
XX
AC   ADK23613;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Fungal universal forward primer #SEQ ID 32.
XX
KW   Aspergillus; internal transcribed spacer; ITS; ITS1-V1; ITS-V2; ITS-V3;
KW   ITS-V4; ITS-V5; PCR; primer; ss.
XX
OS   Synthetic.
XX
PN   WO2003097815-A2.
XX
PD   27-NOV-2003.
XX
PF   16-MAY-2003; 2003WO-US016076.
```

```
XX
PR   17-MAY-2002; 2002US-0381463P.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Morrison CJ,  Hinrikson HP;
XX
DR   WPI; 2004-022871/02.
XX
PT   Use of internal transcribed spacer 1 nucleic acid sequences, for
PT   distinguishing species of Aspergillus from one another, or detecting the
PT   presence of an Aspergillus species or strain of a species in a biological
PT   sample.
XX
PS   Disclosure; SEQ ID NO 32; 56pp; English.
XX
CC   The invention relates to a method for distinguishing species of
CC   Aspergillus from one another, comprising detecting differences in two or
CC   more internal transcribed spacer (ITS), i.e. ITS1-V1, ITS-V2, ITS-V3, ITS
CC   -V4 and ITS-V5, nucleic acid sequences of Aspergillus. The internal
CC   transcribed spacer 1 nucleic acid sequences are useful for distinguishing
CC   species of Aspergillus from one another, or for detecting the presence of
CC   an Aspergillus species in a biological sample. In an example from the
CC   invention, a biological sample was obtained from an infected subject, and
CC   the fungus was cultured for the growth of Aspergillus, followed by
CC   isolation of fungal DNA. The universal pairs internal transcribed spacer
CC   (ITS)5 and ITS2, ITS5 and ITS4, ITS1 and ITS2, or ITS1 and ITS4 were
CC   added to the reaction mixture to amplify the fungal DNA present in the
CC   mixture. PCR products generated with the primer pairs were purified, and
CC   the purified products were sequenced on both strands using the same
CC   primers as initially used for PCR amplification. Sequencing products were
CC   purified and analysed on an automated capillary DNA sequencer. A total of
CC   46 ITS1 consensus sequences ranging in length from 142-187 nucleotides
CC   were compiled. Overall, 5 regions with significant interspecies
CC   variability in length and sequence were recognised. The current sequence
CC   represents the nucleic acid sequence of a fungal universal forward
CC   primer.
XX
SQ   Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1549 CTTCGGTCTTCGTCGATGC 1567
              || || ||||| |||||||
Db         19 CTGCGTTCTTCATCGATGC 1


RESULT 1127
ADL06765/c
ID   ADL06765 standard; DNA; 20 BP.
XX
AC   ADL06765;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Factor VII variant allele-specific probe/PCR primer F710G, SEQ 36.
XX
KW   Human; factor VII; FVII; chromosome 13q34-qter; allelic variation;
KW   plasma stability; function; single nucleotide polymorphism; SNP;
KW   insertion; predisposition; cardiovascular disease; detection; diagnosis;
KW   patient-specific treatment; coagulation disorder; thrombotic disorder;
KW   thrombosis; haemostatic; thrombolytic; allele-specific; PCR; primer;
KW   probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO2004011675-A2.
XX
PD   05-FEB-2004.
XX
PF   23-JUL-2003; 2003WO-ES000379.
XX
PR   25-JUL-2002; 2002ES-00001749.
XX
PA   (PRIV-) FUNDACIO PRIVADA I INST RECERCA LHOSPITA.
XX
PI   Fontcuberta Boj J,  Soria Fernandez JM;
XX
DR   WPI; 2004-143875/14.
XX
PT   New allelic variants of the factor VII gene, useful in diagnosing
PT   predisposition to cardiovascular disease and for treatment of e.g.
PT   coagulation disorders and thrombosis.
XX
PS   Claim 7; SEQ ID NO 36; 32pp; Spanish.
XX
CC   The invention relates to a human factor VII (FVII) polynucleotide
CC   sequence including at least one allelic variation that affects the
CC   stability and/or function of the gene or of the encoded factor VII. 49
CC   factor VII allelic variations, most of which are single nucleotide
CC   polymorphisms (SNPS), but which also include insertions, are tabulated in
CC   the specification and are indicative of a predisposition to
CC   cardiovascular disease. Factor VII activates the coagulation cascade
CC   after it binds to tissue factor, and the gene encoding it is located on
CC   chromosome 13q34-qter. The invention also relates to 36 oligonucleotide
CC   probes specific for the variant factor VII alleles (ADL06730-ADL06765), a
CC   process for testing for the presence of any of the 49 variations, and a
CC   diagnostic kit which contains the allele-specific oligonucleotides. The
CC   method of the invention can be used to detect the presence of variant
CC   factor VII alleles, and thus to determine whether an individual has a
CC   predisposition to cardiovascular disorders. Analysis of the factor VII
CC   allelic variations will permit the design of patient-specific treatments
CC   for factor VII-related disorders. Additionally, factor VII proteins
CC   containing at least one allelic variation of the invention (e.g., one
CC   which increases plasma stability) are useful as pharmaceuticals for
CC   treating disorders of blood coagulation or thrombosis. The present
CC   sequence represents a specifically claimed allelic variant-specific
CC   oligonucleotide probe, which was also used as a PCR primer in an example
CC   of the invention.
XX
SQ   Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        701 TCAAGGAGATCAGACTGGA 719
              |||| ||  ||||||||||
Db         19 TCAAAGACCTCAGACTGGA 1


RESULT 1128
ADJ45621/c
ID   ADJ45621 standard; DNA; 20 BP.
XX
AC   ADJ45621;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human GPCR 12 antisense oligonucleotide ISIS238089.
XX
KW   Human; ss; antisense gene therapy; G protein-coupled receptor 12;
KW   GPCR 12; appetite control; nootropic; neuroprotective;
KW   neuroendocrine system disorder; signal transduction disorder;
KW   neuronal disorder; motor disorder; sensory disorder;
KW   psychiatric disorder; behavioural disorder.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "All cytidines are 5-methylcytidines and all
```

```
FT                   linkages are phosphorothioate linkages"
FT   modified_base   1. .5
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl-nucleotide"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl-nucleotide"
XX
PN   US2004023384-A1.
XX
PD   05-FEB-2004.
XX
PF   31-JUL-2002; 2002US-00211908.
XX
PR   31-JUL-2002; 2002US-00211908.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP, Dobie KW;
XX
DR   WPI; 2004-142665/14.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding G protein-coupled receptor 12 (GPCR-12), useful for
PT   treating diseases of the neuroendocrine system.
XX
PS   Example 15; SEQ ID NO 39; 54pp; English.
XX
CC   The invention relates to a compound 8-80 nucleobases in length targeted
CC   to, and which specifically hybridises with a nucleic acid molecule
CC   encoding GPCR-12 (G protein-coupled receptor 12), and inhibits the
CC   expression of GPCR-12, i.e. an antisense oligonucleotide (AS). Also are a
CC   compound 8-80 nucleobases in length that specifically hybridises with at
CC   least an 8-nucleobase portion of an active site on a nucleic acid
CC   molecule encoding GPCR-12, a composition comprising the compound and a
CC   carrier or diluent, inhibiting the expression of GPCR-12 in cells or
CC   tissues (by contacting the cells or tissues with the compound so that
CC   expression of GPCR-12 is inhibited), treating an animal having a disease
CC   or condition associated with GPCR-12 (by administering to the animal a
CC   therapeutic or prophylactic amount of the compound so that expression of
CC   GPCR-12 is inhibited) and screening an antisense compound (by contacting
CC   a preferred target region of a nucleic acid molecule encoding GPCR-12
CC   with one or more candidate antisense compounds comprising at least an 8-
CC   nucleobase portion that is complementary to the preferred target region
CC   and selecting for one or more candidate antisense compounds that inhibit
CC   the expression of a nucleic acid encoding GPCR-12). The compound,
CC   composition and methods are useful for treating a disease or condition
CC   associated with GPCR-12, such as a disease or conditions involving the
CC   neuroendocrine system, or aberrant signal transduction in brain tissue,
CC   or a disease or condition involving the neuronal, motor, sensory,
CC   psychiatric or behavioural disorder and in appetite control. They are
CC   also useful in research and diagnostics for modulating the expression of
CC   GPCR-12. The present sequence is an antisense oligonucleotide targeting
CC   human GPCR 12 mRNA.
XX
SQ   Sequence 20 BP; 7 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1706 TGCCTACCTGCCTGAGCCA 1724
              ||||||||||| | || ||
Db         19 TGCCTACCTGCTTCAGTCA 1


RESULT 1129
ADJ22655/c
ID   ADJ22655 standard; DNA; 20 BP.
XX
AC   ADJ22655;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human endothelial lipase antisense oligonucleotide, SEQ ID 1053.
XX
KW   Antilipaemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
KW   Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL;
KW   cardiovascular disorder; metabolic syndrome X; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "This oligonucleotide has a phosphorothioate
FT                   backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5'
FT                   and 3' ends, which are 4 nucleotides in length. Also all
FT                   cytidine residues are 5-methylcytidines"
XX
PN   WO2004009541-A2.
XX
PD   29-JAN-2004.
XX
PF   18-JUL-2003; 2003WO-US022410.
XX
PR   19-JUL-2002; 2002US-0397106P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Bhat BG;
XX
DR   WPI; 2004-132912/13.
XX
PT   New antisense oligonucleotide for modulating endothelial lipase
PT   expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
PT   high density lipoprotein or cardiovascular disorders.
XX
PS   Claim 3; SEQ ID NO 1053; 1007pp; English.
XX
CC   The present invention relates to antisense oligonucleotides (ADJ21603-
CC   ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence
CC   (ADJ25517), where the antisense oligonucleotide specifically hybridises
CC   with and inhibits the expression of EL. The antisense oligonucleotides
CC   are useful for modulating the expression of endothelial lipase in cells
CC   or tissues to treat diseases associated with EL expression, such as
CC   dyslipidaemia, low high density lipoprotein (HDL), cardiovascular
CC   disorder or metabolic syndrome X. In addition, the oligonucleotides are
CC   used for diagnostics, prophylaxis, or as research reagents or kits.
XX
SQ   Sequence 20 BP; 5 A; 2 C; 10 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1689 CTTCCCTGCTTACTCTCTG 1707
              || ||| ||| ||||||||
Db         20 CTCCCCAGCTCACTCTCTG 2


RESULT 1130
ADJ22405/c
ID   ADJ22405 standard; DNA; 20 BP.
XX
AC   ADJ22405;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human endothelial lipase antisense oligonucleotide, SEQ ID 803.
XX
KW   Antilipaemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
```

```
KW   Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL;
KW   cardiovascular disorder; metabolic syndrome X; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "This oligonucleotide has a phosphorothioate
FT                   backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5'
FT                   and 3' ends, which are 4 nucleotides in length. Also all
FT                   cytidine residues are 5-methylcytidines"
XX
PN   WO2004009541-A2.
XX
PD   29-JAN-2004.
XX
PF   18-JUL-2003; 2003WO-US022410.
XX
PR   19-JUL-2002; 2002US-0397106P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Bhat BG;
XX
DR   WPI; 2004-132912/13.
XX
PT   New antisense oligonucleotide for modulating endothelial lipase
PT   expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
PT   high density lipoprotein or cardiovascular disorders.
XX
PS   Claim 3; SEQ ID NO 803; 1007pp; English.
XX
CC   The present invention relates to antisense oligonucleotides (ADJ21603-
CC   ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence
CC   (ADJ25517), where the antisense oligonucleotide specifically hybridises
CC   with and inhibits the expression of EL. The antisense oligonucleotides
CC   are useful for modulating the expression of endothelial lipase in cells
CC   or tissues to treat diseases associated with EL expression, such as
CC   dyslipidaemia, low high density lipoprotein (HDL), cardiovascular
CC   disorder or metabolic syndrome X. In addition, the oligonucleotides are
CC   used for diagnostics, prophylaxis, or as research reagents or kits.
XX
SQ   Sequence 20 BP; 5 A; 3 C; 10 G; 2 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1689 CTTCCCTGCTTACTCTCTG 1707
                || ||| ||| ||||||||
Db         19 CTCCCCAGCTCACTCTCTG 1


RESULT 1131
ADJ25252/c
ID   ADJ25252 standard; DNA; 20 BP.
XX
AC   ADJ25252;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human endothelial lipase antisense oligonucleotide, SEQ ID 3650.
XX
KW   Antilipaemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
KW   Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL;
KW   cardiovascular disorder; metabolic syndrome X; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "This oligonucleotide has a phosphorothioate
FT                   backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5'
FT                   and 3' ends, which are 4 nucleotides in length. Also all
FT                   cytidine residues are 5-methylcytidines"
XX
PN   WO2004009541-A2.
XX
PD   29-JAN-2004.
XX
PF   18-JUL-2003; 2003WO-US022410.
XX
PR   19-JUL-2002; 2002US-0397106P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Bhat BG;
XX
DR   WPI; 2004-132912/13.
XX
PT   New antisense oligonucleotide for modulating endothelial lipase
PT   expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
PT   high density lipoprotein or cardiovascular disorders.
XX
PS   Claim 3; SEQ ID NO 3650; 1007pp; English.
XX
CC   The present invention relates to antisense oligonucleotides (ADJ21603-
CC   ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence
CC   (ADJ25517), where the antisense oligonucleotide specifically hybridises
CC   with and inhibits the expression of EL. The antisense oligonucleotides
CC   are useful for modulating the expression of endothelial lipase in cells
CC   or tissues to treat diseases associated with EL expression, such as
CC   dyslipidaemia, low high density lipoprotein (HDL), cardiovascular
CC   disorder or metabolic syndrome X. In addition, the oligonucleotides are
CC   used for diagnostics, prophylaxis, or as research reagents or kits.
XX
SQ   Sequence 20 BP; 2 A; 6 C; 6 G; 6 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1375 GACGGGGCCGACCTCCTCA 1393
                || |||||||| ||| ||
Db         19 GAAGGGGCCGACATCCACA 1


RESULT 1132
ADJ25455/c
ID   ADJ25455 standard; DNA; 20 BP.
XX
AC   ADJ25455;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human endothelial lipase antisense oligonucleotide, SEQ ID 3853.
XX
KW   Antilipaemic; Cardiovascular; Analgesic; Antianginal; Antisense therapy;
KW   Human; Endothelial Lipase; dyslipidaemia; high density lipoprotein; HDL;
KW   cardiovascular disorder; metabolic syndrome X; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "This oligonucleotide has a phosphorothioate
FT                   backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5'
```

FT and 3' ends, which are 4 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX
PN WO2004009541-A2.
XX
PD 29-JAN-2004.
XX
PF 18-JUL-2003; 2003WO-US022410.
XX
PR 19-JUL-2002; 2002US-0397106P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Bhat BG;
XX
DR WPI; 2004-132912/13.
XX
PT New antisense oligonucleotide for modulating endothelial lipase
PT expression, for diagnosing, preventing or treating e.g. dyslipidemia, low
PT high density lipoprotein or cardiovascular disorders.
XX
PS Claim 3; SEQ ID NO 3853; 1007pp; English.
XX
CC The present invention relates to antisense oligonucleotides (ADJ21603-
CC ADJ25510) targeted to human Endothelial Lipase (EL) coding sequence
CC (ADJ25517), where the antisense oligonucleotide specifically hybridises
CC with and inhibits the expression of EL. The antisense oligonucleotides
CC are useful for modulating the expression of endothelial lipase in cells
CC or tissues to treat diseases associated with EL expression, such as
CC dyslipidaemia, low high density lipoprotein (HDL), cardiovascular
CC disorder or metabolic syndrome X. In addition, the oligonucleotides are
CC used for diagnostics, prophylaxis, or as research reagents or kits.
XX
SQ Sequence 20 BP; 1 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1375 GACGGGGCCGACCTCCTCA 1393
|| ||||||||| ||| ||
Db 20 GAAGGGGCCGACATCCACA 2

RESULT 1133
ADK73941/c
ID ADK73941 standard; DNA; 20 BP.
XX
AC ADK73941;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1275.
XX
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX
PF 14-AUG-2003; 2003WO-US025465.
XX
PR 14-AUG-2002; 2002US-0403416P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Roberds SL;
XX
DR WPI; 2004-203785/19.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
PS Claim 4; SEQ ID NO 1275; 417pp; English.
XX
CC The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound
CC specifically hybridizes with and inhibits the expression of Nav1.3. The
CC compound and composition are useful for treating a disease or condition
CC associated with Nav1.3, e.g. pain including but not limited to
CC neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC pain from burns, migraine headache, cluster headache, mild-to-moderate
CC headache; seizure disorder such as childhood seizure disorder, including
CC but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC sequence represents a chimeric phosphorothioate oligonucleotide with
CC 2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC human Nav1.3 expression, the oligonucleotides are designed to target
CC different regions of the human Nav1.3 RNA.
XX
SQ Sequence 20 BP; 7 A; 1 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1451 ATCCATTCTTCCTCAGTCT 1469
||||||||||| |||||
Db 19 ATCCATTCTTCACAAGTCT 1

RESULT 1134
ADK74219/c
ID ADK74219 standard; DNA; 20 BP.
XX
AC ADK74219;
XX
DT 20-MAY-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide to target Nav1.3 #1553.
XX
KW Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW diabetic neuropathy; arthritic pain; migraine headache;
KW infantile epilepsy; ataxia; ss.
XX
OS Synthetic.
XX
PN WO2004016754-A2.
XX
PD 26-FEB-2004.
XX
PF 14-AUG-2003; 2003WO-US025465.
XX
PR 14-AUG-2002; 2002US-0403416P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Roberds SL;
XX
DR WPI; 2004-203785/19.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT Nav1.3, useful for useful for treating a disease or condition associated
PT with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT disorder, or ataxia.
XX
PS Claim 4; SEQ ID NO 1553; 417pp; English.
XX
CC The present invention relates to an antisense compound targeted to a
CC nucleic acid molecule encoding Nav1.3, where the antisense compound

```
CC   specifically hybridizes with and inhibits the expression of Nav1.3. The
CC   compound and composition are useful for treating a disease or condition
CC   associated with Nav1.3, e.g. pain including but not limited to
CC   neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC   diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC   pain from burns, migraine headache, cluster headache, mild-to-moderate
CC   headache; seizure disorder such as childhood seizure disorder, including
CC   but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC   sequence represents a chimeric phosphorothioate oligonucleotide with
CC   2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC   human Nav1.3 expression, the oligonucleotides are designed to target
CC   different regions of the human Nav1.3 RNA.
XX
SQ   Sequence 20 BP; 8 A; 1 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1451 ATCCATTCTTCCTCAGTCT 1469
              ||||||||||||   |||||
Db         20 ATCCATTCTTCACAAGTCT 2


RESULT 1135
ADL00908/c
ID   ADL00908 standard; DNA; 20 BP.
XX
AC   ADL00908;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #441.
XX
KW   Human; VEGF co-regulated chemokine-1; VCC-1;
KW   vascular endothelial growth factor; ss; antisense compound;
KW   phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; antisense oligonucleotide; diabetes;
KW   immunological disorder; cardiovascular disorder; neurological disorder;
KW   ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;
KW   tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;
KW   fibrosis; myocardial infarction; wound healing; bone fracture;
KW   cartilage damage; tissue regeneration; organ regeneration;
KW   periodontal disease; gut regeneration; atrial fibrillation.
XX
OS   Homo sapiens.
XX
PN   WO2004016224-A2.
XX
PD   26-FEB-2004.
XX
PF   19-AUG-2003; 2003WO-US025891.
XX
PR   19-AUG-2002; 2002US-0404484P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Weinstein EJ;
XX
DR   WPI; 2004-192065/18.
XX
PT   New antisense compounds targeted to a nucleic acid molecule encoding
PT   vascular endothelial growth factor co-regulated chemokine-1 (VCC-1),
PT   useful for treating VCC-1-associated disorders, e.g. diabetes or a
PT   neurologic disorder.
XX
PS   Claim 4; SEQ ID NO 441; 336pp; English.
XX
CC   The invention relates to an antisense compound targeted to a nucleic acid
CC   molecule encoding human vascular endothelial growth factor (VEGF) co-
CC   regulated chemokine-1 (VCC-1), and which specifically hybridises with and
CC   inhibits the expression of VCC-1. The invention also relates to a
CC   composition comprising the antisense compound, a method of inhibiting the
CC   expression of VCC-1 in cells or tissues comprising contacting the cells
CC   or tissues with the antisense compound and a method of treating a human
CC   having a disease or condition associated with VCC-1 comprising
CC   administering the antisense compound to an animal to inhibit expression
CC   of VCC-1. The antisense oligonucleotide comprises at least one modified
CC   internucleoside linkage, preferably a phosphorothioate linkage. It also
CC   comprises at least one modified sugar moiety, preferably a 2'-O-
CC   methoxyethyl sugar moiety, and at least one modified nucleobase,
CC   specifically a 5-methylcytosine. The antisense oligonucleotide preferably
CC   is a chimeric oligonucleotide. The antisense compound is useful for
CC   treating a disease or condition associated with VCC-1, such as diabetes,
CC   an immunological disorder, a cardiovascular disorder, a neurological
CC   disorder, ischaemia, reperfusion injury, cancer or an angiogenic
CC   disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis,
CC   atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1
CC   antisense oligonucleotides may also be used for wound healing, for
CC   healing of bone fractures and cartilage damage, for regeneration of
CC   tissues or organs, for treating periodontal diseases, for gut protection
CC   or regeneration, for treatment of lung or liver fibrosis or for
CC   management of atrial fibrillation. This sequence represents an antisense
CC   oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of
CC   the invention.
XX
SQ   Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1176 CTTCTATGAGATGGCCACA 1194
              |||||| ||||||||  ||
Db         19 CTTCTAGGAGATGGCTCCA 1


RESULT 1136
ADL00949/c
ID   ADL00949 standard; DNA; 20 BP.
XX
AC   ADL00949;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #482.
XX
KW   Human; VEGF co-regulated chemokine-1; VCC-1;
KW   vascular endothelial growth factor; ss; antisense compound;
KW   phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; antisense oligonucleotide; diabetes;
KW   immunological disorder; cardiovascular disorder; neurological disorder;
KW   ischaemia; reperfusion injury; cancer; angiogenic disorder; haemangioma;
KW   tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis;
KW   fibrosis; myocardial infarction; wound healing; bone fracture;
KW   cartilage damage; tissue regeneration; organ regeneration;
KW   periodontal disease; gut regeneration; atrial fibrillation.
XX
OS   Homo sapiens.
XX
PN   WO2004016224-A2.
XX
PD   26-FEB-2004.
XX
PF   19-AUG-2003; 2003WO-US025891.
XX
PR   19-AUG-2002; 2002US-0404484P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Weinstein EJ;
XX
DR   WPI; 2004-192065/18.
XX
PT   New antisense compounds targeted to a nucleic acid molecule encoding
PT   vascular endothelial growth factor co-regulated chemokine-1 (VCC-1),
```

PT useful for treating VCC-1-associated disorders, e.g. diabetes or a
PT neurologic disorder.
XX
PS Claim 4; SEQ ID NO 482; 336pp; English.
XX
CC The invention relates to an antisense compound targeted to a nucleic acid
CC molecule encoding human vascular endothelial growth factor (VEGF) co-
CC regulated chemokine-1 (VCC-1), and which specifically hybridises with and
CC inhibits the expression of VCC-1. The invention also relates to a
CC composition comprising the antisense compound, a method of inhibiting the
CC expression of VCC-1 in cells or tissues comprising contacting the cells
CC or tissues with the antisense compound and a method of treating a human
CC having a disease or condition associated with VCC-1 comprising
CC administering the antisense compound to an animal to inhibit expression
CC of VCC-1. The antisense oligonucleotide comprises at least one modified
CC internucleoside linkage, preferably a phosphorothioate linkage. It also
CC comprises at least one modified sugar moiety, preferably a 2'-O-
CC methoxyethyl sugar moiety, and at least one modified nucleobase,
CC specifically a 5-methylcytosine. The antisense oligonucleotide preferably
CC is a chimeric oligonucleotide. The antisense compound is useful for
CC treating a disease or condition associated with VCC-1, such as diabetes,
CC an immunological disorder, a cardiovascular disorder, a neurological
CC disorder, ischaemia, reperfusion injury, cancer or an angiogenic
CC disorder, e.g. haemangioma, tumour angiogenesis, rheumatoid arthritis,
CC atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1
CC antisense oligonucleotides may also be used for wound healing, for
CC healing of bone fractures and cartilage damage, for regeneration of
CC tissues or organs, for treating periodontal diseases, for gut protection
CC or regeneration, for treatment of lung or liver fibrosis or for
CC management of atrial fibrillation. This sequence represents an antisense
CC oligonucleotide targeted to DNA encoding the human VCC-1 polypeptide of
CC the invention.
XX
SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1178 TCTATGAGATGGCCACAGG 1196
|||| |||||||| ||||
Db 20 TCTAGGAGATGGCTCCAGG 2

RESULT 1137
ADN42701
ID ADN42701 standard; DNA; 20 BP.
XX
AC ADN42701;
XX
DT 17-JUN-2004 (first entry)
XX
DE Human NOV42a/b RTQ-PCR reverse primer #1.
XX
KW Human; ss; NOVX; cancer; diabetes; cardiomyopathy; atherosclerosis; PCR;
KW primer; RTQ PCR; real time quantitative PCR.
XX
OS Homo sapiens.
XX
PN US2004033493-A1.
XX
PD 19-FEB-2004.
XX
PF 31-JAN-2002; 2002US-00072012.
XX
PR 31-JAN-2001; 2001US-0265395P.
PR 31-JAN-2001; 2001US-0265412P.
PR 31-JAN-2001; 2001US-0265514P.
PR 31-JAN-2001; 2001US-0265517P.
PR 02-FEB-2001; 2001US-0266406P.
PR 05-FEB-2001; 2001US-0266767P.
PR 07-FEB-2001; 2001US-0266975P.
PR 07-FEB-2001; 2001US-0267057P.
PR 08-FEB-2001; 2001US-0267459P.
PR 09-FEB-2001; 2001US-0267823P.
PR 15-FEB-2001; 2001US-0268974P.
PR 26-FEB-2001; 2001US-0271664P.
PR 27-FEB-2001; 2001US-0271839P.
PR 27-FEB-2001; 2001US-0271855P.
PR 02-MAR-2001; 2001US-0272788P.
PR 02-MAR-2001; 2001US-0273046P.
PR 14-MAR-2001; 2001US-0275925P.
PR 14-MAR-2001; 2001US-0275947P.
PR 14-MAR-2001; 2001US-0275950P.
PR 14-MAR-2001; 2001US-0275989P.
PR 15-MAR-2001; 2001US-0276448P.
PR 15-MAR-2001; 2001US-0276450P.
PR 16-MAR-2001; 2001US-0276397P.
PR 16-MAR-2001; 2001US-0276768P.
PR 20-MAR-2001; 2001US-0278652P.
PR 26-MAR-2001; 2001US-0278775P.
PR 26-MAR-2001; 2001US-0278778P.
PR 29-MAR-2001; 2001US-0279882P.
PR 29-MAR-2001; 2001US-0279884P.
PR 30-MAR-2001; 2001US-0280147P.
PR 11-APR-2001; 2001US-0282992P.
PR 11-APR-2001; 2001US-0283083P.
PR 20-APR-2001; 2001US-0285133P.
PR 23-APR-2001; 2001US-0285749P.
PR 03-MAY-2001; 2001US-0288327P.
PR 03-MAY-2001; 2001US-0288504P.
PR 29-MAY-2001; 2001US-0294047P.
PR 30-MAY-2001; 2001US-0294473P.
PR 08-JUN-2001; 2001US-0296964P.
PR 18-JUN-2001; 2001US-0298959P.
PR 19-JUN-2001; 2001US-0299324P.
PR 13-AUG-2001; 2001US-0312020P.
PR 16-AUG-2001; 2001US-0312889P.
PR 16-AUG-2001; 2001US-0312908P.
PR 21-AUG-2001; 2001US-0313930P.
PR 28-AUG-2001; 2001US-0315470P.
PR 31-AUG-2001; 2001US-0316447P.
PR 07-SEP-2001; 2001US-0318115P.
PR 07-SEP-2001; 2001US-0318118P.
PR 12-SEP-2001; 2001US-0318740P.
PR 19-SEP-2001; 2001US-0323379P.
PR 18-OCT-2001; 2001US-0330245P.
PR 18-OCT-2001; 2001US-0330308P.
PR 14-NOV-2001; 2001US-0332701P.
XX
PA (TCHE/) TCHERNEV V T.
PA (SPYT/) SPYTEK K A.
PA (ZERH/) ZERHUSEN B D.
PA (PATT/) PATTURAJAN M.
PA (SHIM/) SHIMKETS R A.
PA (LILL/) LI L.
PA (GANG/) GANGOLLI E A.
PA (PADI/) PADIGARU M.
PA (ANDE/) ANDERSON D W.
PA (RAST/) RASTELLI L.
PA (MILL/) MILLER C E.
PA (GERL/) GERLACH V.
PA (TAUP/) TAUPIER R J.
PA (GUSE/) GUSEV V Y.
PA (COLM/) COLMAN S D.
PA (WOLE/) WOLENC A R.
PA (PENA/) PENA C E A.
PA (FURT/) FURTAK K.
PA (GROS/) GROSSE W M.
PA (ALSO/) ALSOBROOK J P.
PA (LEPL/) LEPLEY D M.
PA (RIEG/) RIEGER D K.
PA (BURG/) BURGESS C E.
XX
PI Tchernev VT, Spytek KA, Zerhusen BD, Patturajan M, Shimkets RA;
PI Li L, Gangolli EA, Padigaru M, Anderson DW, Rastelli L, Miller CE;

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PI   Gerlach V,  Taupier RJ,  Gusev VY,  Colman SD,  Wolenc AR,  Pena CEA;
PI   Furtak K,  Grosse WM,  Alsobrook JP,  Lepley DM,  Rieger DK,  Burgess CE;
XX
DR   WPI; 2004-180039/17.
XX
PT   Isolated NOVX polypeptides and polynucleotides, useful for preventing
PT   diagnosing and/or treating cancer, diabetes, cardiomyopathy and
PT   atherosclerosis.
XX
PS   Example 2; SEQ ID NO 1149; 1309pp; English.
XX
CC   The invention relates isolated 162 NOVX polypeptides (NOV1-NOV99,
CC   including splice variants) and the nucleic acids (NA) that encode them.
CC   Also included are the mature NOVX proteins (and their encoding
CC   polynucleotides), a vector comprising NOVX NA, a cell comprising the
CC   vector, an antibody that binds immunospecifically to NOVX, determining
CC   the presence or amount of NOVX in a sample, determining the presence or
CC   amount of NOVX NA in a sample, identifying an agent that binds to NOVX,
CC   modulating the activity of NOVX, treating or preventing a NOVX-associated
CC   disorder, determining the presence of or predisposition to a disease
CC   associated with altered levels of NOVX and treating a pathological state
CC   in a mammal comprising administering a polypeptide which is at least 95%
CC   identical to NOVX (or fragment). NOVX and NA may be used in the
CC   prevention, treatment and diagnosis of diseases associated with
CC   inappropriate expression and activity of NOVX (e.g. cancer, diabetes,
CC   cardiomyopathy and/or atherosclerosis). The anti-NOVX antibodies and
CC   antagonists may also be used to down regulate expression and activity of
CC   NOVX. The anti-NOVX antibodies may also be used as diagnostic agents for
CC   detecting the presence of NOVX in samples (e.g. by enzyme linked
CC   immunosorbant assay (ELISA). The agents and methods may be used in this
CC   way to prevent, diagnose and treat cancer, diabetes, cardiomyopathy
CC   and/or atherosclerosis. The present sequence is a real time quantitative
CC   PCR (RTQ PCR) primer for tissue specific expression studies for a NOVX
CC   gene.
XX
SQ   Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        506 AGGGCTACCTGGAGAAGCT 524
              ||| | | ||||||||||| 
Db          2 AGGACCATCTGGAGAAGCT 20


RESULT 1138
ADN06167
ID   ADN06167 standard; DNA; 20 BP.
XX
AC   ADN06167;
XX
DT   17-JUN-2004  (first entry)
XX
DE   Human SPS2 specific antisense oligonucleotide, ISIS 138236.
XX
KW   Selenophosphate synthetase 2; SPS2; rheumatoid arthritis; infection;
KW   inflammation; tumour; antisense therapy; human; antisense;
KW   phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone in which all cytidines
FT                    are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl nucleotides"
XX
PN   US2004002151-A1.
XX
PD   01-JAN-2004.
XX
PF   28-JUN-2002; 2002US-00186157.
XX
PR   28-JUN-2002; 2002US-00186157.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Watt AT,  Freier SM;
XX
DR   WPI; 2004-070740/07.
XX
PT   New antisense oligonucleotides for modulating selenophosphate synthetase
PT   2 (SPS2) expression, useful for diagnosing, preventing or treating
PT   conditions associated with SPS2, e.g. rheumatoid arthritis, inflammation
PT   or tumors.
XX
PS   Example 15; SEQ ID NO 11; 47pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating the expression of selenophosphate synthetase 2 (SPS2). The
CC   composition comprises antisense oligonucleotides targeted to SPS2 gene.
CC   The antisense oligonucleotide is useful for modulating the expression of
CC   SPS2 in cells or tissues to treat diseases associated with their
CC   expression, e.g. rheumatoid arthritis, infections, inflammation or
CC   tumours. It is also used for diagnostics, prophylaxis, or as research
CC   reagents or kits. The antisense oligonucleotide is useful in antisense
CC   therapy. The present sequence is an antisense oligonucleotide targeted to
CC   human SPS2 DNA. This sequence is used in the exemplification of the
CC   invention.
XX
SQ   Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1480 ATCCACAAACTTCCTGACA 1498
              || ||||| |||||||| |
Db          1 ATGCACAATCTTCCTGATA 19


RESULT 1139
ADL34826/c
ID   ADL34826 standard; DNA; 20 BP.
XX
AC   ADL34826;
XX
DT   17-JUN-2004  (first entry)
XX
DE   Antisense oligonucleotide ISIS 221095.
XX
KW   antisense; PPAR-delta; hybridisation; inhibitor;
KW   phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine;
KW   hyperproliferative disorder; cancer; cytostatic; gene therapy; ss;
KW   primer.
XX
OS   Synthetic.
XX
PN   US2004063129-A1.
XX
PD   01-APR-2004.
XX
PF   05-SEP-2003; 2003US-00655847.
XX
PR   31-MAY-2002; 2002US-00160807.
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XX
PA   (GAAR/) GAARDE W.
PA   (FREI/) FREIER S M.
PA   (WATT/) WATT A T.
XX
PI   Gaarde W,  Freier SM,  Watt AT;
XX
DR   WPI; 2004-282460/26.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding PPAR-delta, useful for preparing a composition for treating
PT   hyperproliferative disorder, e.g., cancer.
XX
PS   Example 16; SEQ ID NO 124; 0pp; English.
XX
CC   This invention describes novel antisense oligonucleotides targeted to a
CC   nucleic acid encoding PPAR-delta, which specifically hybridise to and
CC   inhibit expression of PPAR-delta. The oligonucleotide specifically
CC   hybridises with at least an 8-nucleobase portion of an active site on the
CC   nucleic acid molecule encoding the PPAR-delta and comprises at least one
CC   modified internucleoside linkage, which is a phosphorothioate linkage, at
CC   least one modified sugar moiety, which is a 2'-O-methoxyethyl sugar
CC   moiety or at least one modified nucleobase, which is a 5-methylcytosine.
CC   The antisense oligonucleotides are useful for preparing a composition for
CC   treating hyperproliferative disorders, e.g., cancer. The oligonucleotides
CC   of the invention have cytostatic activity and can be used for gene
CC   therapy.
XX
SQ   Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        344 TGAAGATGGGGTCTGATGG 362
              || ||||||| | ||||||
Db         19 TGCAGATGGGCTGTGATGG 1


RESULT 1140
ADL34964
ID   ADL34964 standard; DNA; 20 BP.
XX
AC   ADL34964;
XX
DT   17-JUN-2004  (first entry)
XX
DE   Murine PPAR-delta target site ID 137749.
XX
KW   antisense; PPAR-delta; hybridisation; inhibitor;
KW   phosphorothioate linkage; 2'-O-methoxyethyl sugar; 5-methylcytosine;
KW   hyperproliferative disorder; cancer; cytostatic; gene therapy; ds.
XX
OS   Mus sp.
XX
PN   US2004063129-A1.
XX
PD   01-APR-2004.
XX
PF   05-SEP-2003; 2003US-00655847.
XX
PR   31-MAY-2002; 2002US-00160807.
XX
PA   (GAAR/) GAARDE W.
PA   (FREI/) FREIER S M.
PA   (WATT/) WATT A T.
XX
PI   Gaarde W,  Freier SM,  Watt AT;
XX
DR   WPI; 2004-282460/26.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding PPAR-delta, useful for preparing a composition for treating
PT   hyperproliferative disorder, e.g., cancer.
XX
PS   Example 16; SEQ ID NO 262; 0pp; English.
XX
CC   This invention describes novel antisense oligonucleotides targeted to a
CC   nucleic acid encoding PPAR-delta, which specifically hybridise to and
CC   inhibit expression of PPAR-delta. The oligonucleotide specifically
CC   hybridises with at least an 8-nucleobase portion of an active site on the
CC   nucleic acid molecule encoding the PPAR-delta and comprises at least one
CC   modified internucleoside linkage, which is a phosphorothioate linkage, at
CC   least one modified sugar moiety, which is a 2'-O-methoxyethyl sugar
CC   moiety or at least one modified nucleobase, which is a 5-methylcytosine.
CC   The antisense oligonucleotides are useful for preparing a composition for
CC   treating hyperproliferative disorders, e.g., cancer. The oligonucleotides
CC   of the invention have cytostatic activity and can be used for gene
CC   therapy.
XX
SQ   Sequence 20 BP; 3 A; 3 C; 9 G; 5 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        344 TGAAGATGGGGTCTGATGG 362
              || ||||||| | ||||||
Db          2 TGCAGATGGGCTGTGATGG 20


RESULT 1141
ADN48410/c
ID   ADN48410 standard; DNA; 20 BP.
XX
AC   ADN48410;
XX
DT   01-JUL-2004  (first entry)
XX
DE   Rat Jun N-terminal kinase 1 (JNK1) oligonucleotide #11.
XX
KW   Rat; Jun N-terminal kinase; JNK; Jun N-terminal kinase 1; JNK1;
KW   hyperproliferative disease; cell cycle progression;
KW   protein phosphorylation; tumour growth; cancer; apoptosis;
KW   prostate cancer; inflammation; fibrosis; fibrotic disease; scarring;
KW   peritoneal adhesion; lung fibrosis; conjunctival scarring; cytostatic;
KW   antiinflammatory; vulnerary; ss.
XX
OS   Rattus norvegicus.
XX
PN   US2004029823-A1.
XX
PD   12-FEB-2004.
XX
PF   15-JAN-2003; 2003US-00345444.
XX
PR   13-AUG-1997;   97US-00910629.
PR   07-AUG-1998;   98US-00130616.
PR   07-APR-1999;   99US-00287796.
PR   15-SEP-1999;   99US-00396902.
PR   31-JAN-2001; 2001US-00774809.
XX
PA   (MCKA/) MCKAY R.
PA   (DEAN/) DEAN N M.
PA   (MONI/) MONIA B P.
PA   (NERO/) NERO P S.
PA   (GAAR/) GAARDE W A.
XX
PI   Mckay R,  Dean NM,  Monia BP,  Nero PS,  Gaarde WA;
XX
DR   WPI; 2004-168941/16.
XX
PT   New oligonucleotides, which specifically hybridizes with Jun N-terminal
PT   kinase protein, useful in diagnosing or treating inflammation, fibrosis
PT   or a fibrotic or hyperproliferative disease or condition.
XX
```

```
PS   Example 8; SEQ ID NO 121; 71pp; English.
XX
CC   The invention relates to an oligonucleotide comprising 8-30 nucleotides
CC   connected by covalent linkages, where the oligonucleotide has a sequence
CC   specifically hybridisable with a nucleic acid encoding a Jun N-terminal
CC   kinase (JNK) protein and modulates the expression of the JNK protein. The
CC   invention also relates to a pharmaceutical composition comprising the
CC   oligonucleotide(s) or its bioequivalent and a pharmaceutical carrier, a
CC   method of treating an animal having, suspected of having or prone to
CC   having a hyperproliferative disease, a method of modulating the
CC   expression of a JNK protein in cells or tissues, a method of modulating
CC   cell cycle progression, phosphorylation of a protein phosphorylated by a
CC   JNK protein and expression of a cellular protein that promotes one or
CC   more metastatic events in cultured cells or the cells of an animal, a
CC   method of inhibiting the growth of a tumour in an animal, a method of
CC   inducing apoptosis in a cell, a method of treating a human having a
CC   disease or condition characterised by a reduction in apoptosis and a
CC   method of treating an animal having a disease or condition associated
CC   with a JNK protein. The oligonucleotide and composition are useful in
CC   diagnosing or treating a disease or condition characterised by a
CC   reduction in apoptosis (e.g. prostate cancer), a disease or condition
CC   associated with a JNK protein (e.g. inflammation, fibrosis), a fibrotic
CC   disease or condition (e.g. scarring, peritoneal adhesions, lung fibrosis,
CC   conjunctival scarring) or a hyperproliferative disease or condition (e.g.
CC   cancer), or in inhibiting the growth of a tumour. This sequence
CC   represents a rat JNK1 oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1424 GGATCTCCGCAGAGGATGC 1442
              ||||||||| ||| || ||
Db         20 GGATCTCCGTAGACGAAGC 2


RESULT 1142
ADM14468/c
ID   ADM14468 standard; DNA; 20 BP.
XX
AC   ADM14468;
XX
DT   01-JUL-2004  (first entry)
XX
DE   Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:655.
XX
KW   chimeric; antisense oligonucleotide; phosphorothioate; human;
KW   microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW   microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW   immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW   neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW   immunomodulatory; cardiovascular; gene therapy; inflammation;
KW   Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW   reperfusion injury; ophthalmic disorder; immunological disorder;
KW   cardiovascular disorder; neurological disorder; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "phosphorothioate linkages and all cytidine
FT                    residues are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "2'-O-methocyethyls"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'-O-methoxyethyls"
XX
PN   WO2004028458-A2.
XX
PD   08-APR-2004.
XX
PF   25-SEP-2003; 2003WO-US030374.
XX
PR   25-SEP-2002; 2002US-0413549P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Gierse JK;
XX
DR   WPI; 2004-305094/28.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT   inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT   ischemia.
XX
PS   Claim 4; SEQ ID NO 655; 132pp; English.
XX
CC   The present sequence represents a chimeric antisense oligonucleotide
CC   targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC   human mPGES-1 gene is located on chromosome 9, more specifically to
CC   9q34.3. The present invention also describes: (1) antisense compounds,
CC   having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC   mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC   inhibits its expression; (2) a method of inhibiting the expression of
CC   mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC   having a disease or condition associated with mPGES-1. MPGES-1 chimeric
CC   antisense oligonucleotides and antisense compounds have cytostatic,
CC   antidiabetic, immunomodulator, cardiant, neuroprotective,
CC   antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC   ophthalmological, immunomodulatory and cardiovascular activities, and can
CC   be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC   can be used for preparing a composition for treating a disease or
CC   condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC   disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC   ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ   Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        505 GAGGGCTACCTGGAGAAGC 523
              | || |||||||| |||||
Db         19 GTGGCCTACCTGGGGAAGC 1


RESULT 1143
ADM14758/c
ID   ADM14758 standard; DNA; 20 BP.
XX
AC   ADM14758;
XX
DT   01-JUL-2004  (first entry)
XX
DE   Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:945.
XX
KW   chimeric; antisense oligonucleotide; phosphorothioate; human;
KW   microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW   microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW   immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW   neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW   immunomodulatory; cardiovascular; gene therapy; inflammation;
KW   Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW   reperfusion injury; ophthalmic disorder; immunological disorder;
KW   cardiovascular disorder; neurological disorder; ss.
```

```
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate linkages and all cytidine
FT                   residues are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methocyethyls"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methoxyethyls"
XX
PN   WO2004028458-A2.
XX
PD   08-APR-2004.
XX
PF   25-SEP-2003; 2003WO-US030374.
XX
PR   25-SEP-2002; 2002US-0413549P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Gierse JK;
XX
DR   WPI; 2004-305094/28.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT   inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT   ischemia.
XX
PS   Claim 4; SEQ ID NO 945; 132pp; English.
XX
CC   The present sequence represents a chimeric antisense oligonucleotide
CC   targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC   human mPGES-1 gene is located on chromosome 9, more specifically to
CC   9q34.3. The present invention also describes: (1) antisense compounds,
CC   having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC   mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC   inhibits its expression; (2) a method of inhibiting the expression of
CC   mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC   having a disease or condition associated with mPGES-1. MPGES-1 chimeric
CC   antisense oligonucleotides and antisense compounds have cytostatic,
CC   antidiabetic, immunomodulator, cardiant, neuroprotective,
CC   antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC   ophthalmological, immunomodulatory and cardiovascular activities, and can
CC   be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC   can be used for preparing a composition for treating a disease or
CC   condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC   disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC   ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ   Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1433 CAGAGGATGCCATGAAACA 1451
              | |||||||||| ||| |||
Db         20 CCGAGGATGCCCTGAGACA 2


RESULT 1144
ADM15006/c
ID   ADM15006 standard; DNA; 20 BP.
XX
AC   ADM15006;
XX
DT   01-JUL-2004  (first entry)
XX
DE   Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1193.
XX
KW   chimeric; antisense oligonucleotide; phosphorothioate; human;
KW   microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW   microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW   immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW   neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW   immunomodulatory; cardiovascular; gene therapy; inflammation;
KW   Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW   reperfusion injury; ophthalmic disorder; immunological disorder;
KW   cardiovascular disorder; neurological disorder; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate linkages and all cytidine
FT                   residues are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methocyethyls"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methoxyethyls"
XX
PN   WO2004028458-A2.
XX
PD   08-APR-2004.
XX
PF   25-SEP-2003; 2003WO-US030374.
XX
PR   25-SEP-2002; 2002US-0413549P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Gierse JK;
XX
DR   WPI; 2004-305094/28.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT   inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT   ischemia.
XX
PS   Claim 4; SEQ ID NO 1193; 132pp; English.
XX
CC   The present sequence represents a chimeric antisense oligonucleotide
CC   targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC   human mPGES-1 gene is located on chromosome 9, more specifically to
CC   9q34.3. The present invention also describes: (1) antisense compounds,
CC   having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC   mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC   inhibits its expression; (2) a method of inhibiting the expression of
CC   mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC   having a disease or condition associated with mPGES-1. MPGES-1 chimeric
CC   antisense oligonucleotides and antisense compounds have cytostatic,
CC   antidiabetic, immunomodulator, cardiant, neuroprotective,
CC   antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC   ophthalmological, immunomodulatory and cardiovascular activities, and can
CC   be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC   can be used for preparing a composition for treating a disease or
CC   condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC   disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
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```
CC   ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ   Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1433 CAGAGGATGCCATGAAACA 1451
              | |||||||||| ||| |||
Db         19 CCGAGGATGCCCTGAGACA 1


RESULT 1145
ADO56089/c
ID   ADO56089 standard; DNA; 20 BP.
XX
AC   ADO56089;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Cyclin-dependent kinase 6, antisense oligonucleotide #153.
XX
KW   antisense therapy; cyclin-dependent kinase 6;
KW   hyperproliferative disorder; cancer; bacterial infection;
KW   viral infection; apoptosis; ss; probe; human.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone. All cytidines are 5-
FT                   methylcytidines."
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004087523-A1.
XX
PD   06-MAY-2004.
XX
PF   31-JUL-2002; 2002US-00210802.
XX
PR   31-JUL-2002; 2002US-00210802.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Freier SM,  Dobie KW;
XX
DR   WPI; 2004-356241/33.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding cyclin-dependent kinase 6, useful for treating
PT   cancer, bacterial/viral infection or conditions involving aberrant
PT   apoptosis.
XX
PS   Example 15; Page 31; 68pp; English.
XX
CC   The invention relates to antisense oligonucleotides targeted to cyclin-
CC   dependent kinase 6, and which inhibit the expression of cyclin-dependent
CC   kinase 6. The antisense oligonucleotides are useful for treating a
CC   disease or condition associated with cyclin-dependent kinase 6, such as a
CC   hyperproliferative disorder (e.g. cancer), or conditions arising from
CC   bacterial or viral infections, or involving aberrant apoptosis. They are
CC   also useful in research and diagnostics for modulating the expression of
CC   cyclin-dependent kinase 6. The present sequence represents a cyclin-
CC   dependent kinase 6 antisense oligonucleotide. Note: Seqid 15-134 are also
CC   used in the sequence listing but these sequences do not match seqid 15-
CC   134 displayed in Tables 1 and 2 (page 30-34).
XX
SQ   Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        923 TGTTCCAGCTGCTCCGTGG 941
              |||| ||||| ||||| ||
Db         19 TGTTTCAGCTTCTCCGAGG 1


RESULT 1146
ADO56156
ID   ADO56156 standard; DNA; 20 BP.
XX
AC   ADO56156;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Cyclin-dependent kinase 6, antisense oligonucleotide #220.
XX
KW   antisense therapy; cyclin-dependent kinase 6;
KW   hyperproliferative disorder; cancer; bacterial infection;
KW   viral infection; apoptosis; ss; probe; human.
XX
OS   Homo sapiens.
XX
PN   US2004087523-A1.
XX
PD   06-MAY-2004.
XX
PF   31-JUL-2002; 2002US-00210802.
XX
PR   31-JUL-2002; 2002US-00210802.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Freier SM,  Dobie KW;
XX
DR   WPI; 2004-356241/33.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding cyclin-dependent kinase 6, useful for treating
PT   cancer, bacterial/viral infection or conditions involving aberrant
PT   apoptosis.
XX
PS   Example 15; Page 33; 68pp; English.
XX
CC   The invention relates to antisense oligonucleotides targeted to cyclin-
CC   dependent kinase 6, and which inhibit the expression of cyclin-dependent
CC   kinase 6. The antisense oligonucleotides are useful for treating a
CC   disease or condition associated with cyclin-dependent kinase 6, such as a
CC   hyperproliferative disorder (e.g. cancer), or conditions arising from
CC   bacterial or viral infections, or involving aberrant apoptosis. They are
CC   also useful in research and diagnostics for modulating the expression of
CC   cyclin-dependent kinase 6. The present sequence represents a cyclin-
CC   dependent kinase 6 antisense oligonucleotide. Note: Seqid 15-134 are also
CC   used in the sequence listing but these sequences do not match seqid 15-
CC   134 displayed in Tables 1 and 2 (page 30-34).
XX
SQ   Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        923 TGTTCCAGCTGCTCCGTGG 941
              |||| ||||| ||||| ||
Db          2 TGTTTCAGCTTCTCCGAGG 20
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RESULT 1147
ADO56090/c
ID   ADO56090 standard; DNA; 20 BP.
XX
AC   ADO56090;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Cyclin-dependent kinase 6, antisense oligonucleotide #154.
XX
KW   antisense therapy; cyclin-dependent kinase 6;
KW   hyperproliferative disorder; cancer; bacterial infection;
KW   viral infection; apoptosis; ss; probe; human.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone. All cytidines are 5-
FT                   methylcytidines."
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004087523-A1.
XX
PD   06-MAY-2004.
XX
PF   31-JUL-2002; 2002US-00210802.
XX
PR   31-JUL-2002; 2002US-00210802.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Freier SM,  Dobie KW;
XX
DR   WPI; 2004-356241/33.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding cyclin-dependent kinase 6, useful for treating
PT   cancer, bacterial/viral infection or conditions involving aberrant
PT   apoptosis.
XX
PS   Example 15; Page 31; 68pp; English.
XX
CC   The invention relates to antisense oligonucleotides targeted to cyclin-
CC   dependent kinase 6, and which inhibit the expression of cyclin-dependent
CC   kinase 6. The antisense oligonucleotides are useful for treating a
CC   disease or condition associated with cyclin-dependent kinase 6, such as a
CC   hyperproliferative disorder (e.g. cancer), or conditions arising from
CC   bacterial or viral infections, or involving aberrant apoptosis. They are
CC   also useful in research and diagnostics for modulating the expression of
CC   cyclin-dependent kinase 6. The present sequence represents a cyclin-
CC   dependent kinase 6 antisense oligonucleotide. Note: Seqid 15-134 are also
CC   used in the sequence listing but these sequences do not match seqid 15-
CC   134 displayed in Tables 1 and 2 (page 30-34).
XX
SQ   Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        928 CAGCTGCTCCGTGGCCTGG 946
              ||||| ||||| || ||||
Db         19 CAGCTTCTCCGAGGTCTGG 1


RESULT 1148
ADN03067/c
ID   ADN03067 standard; DNA; 20 BP.
XX
AC   ADN03067;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human PIM-1 DNA antisense oligonucleotide #24.
XX
KW   Human; PIM-1; ss; antisense oligonucleotide; phosphorothioate linkage;
KW   2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
KW   hyperproliferative disorder; cancer; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004092463-A1.
XX
PD   13-MAY-2004.
XX
PF   11-NOV-2002; 2002US-00292849.
XX
PR   11-NOV-2002; 2002US-00292849.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Watt AT;
XX
DR   WPI; 2004-374981/35.
XX
PT   New compound that modulates PIM-1 expression, useful in treating an
PT   animal having a disease or condition, i.e. hyperproliferative disorder.
XX
PS   Example 15; SEQ ID NO 36; 51pp; English.
XX
CC   The invention relates to a compound targeted to a nucleic acid molecule
CC   encoding the human PIM-1 polypeptide. The compound is an antisense
CC   oligonucleotide that specifically hybridises with the nucleic acid and
CC   inhibits expression of the polypeptide. The antisense oligonucleotide
CC   comprises at least one modified internucleoside linkage i.e. a
CC   phosphorothioate linkage, at least one modified sugar moiety, preferably
CC   a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC   comprising a 5-methylcytosine. The antisense compounds are useful for
CC   modulating the expression of the human PIM-1 polypeptide and in
CC   preparation of a composition for treating hyperproliferative disorders,
CC   e.g. cancer. This sequence represents a human PIM-1 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        966 GGTGCTACACCGAGACCTC 984
              |||||| ||||| ||| ||
Db         19 GGTGCTCCACCGCGACATC 1


RESULT 1149
ADN03134
ID   ADN03134 standard; DNA; 20 BP.
XX
AC   ADN03134;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human PIM-1 DNA antisense oligonucleotide target region #13.
XX
```

KW Human; PIM-1; ss; antisense oligonucleotide; phosphorothioate linkage;
KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
KW hyperproliferative disorder; cancer; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004092463-A1.
XX
PD 13-MAY-2004.
XX
PF 11-NOV-2002; 2002US-00292849.
XX
PR 11-NOV-2002; 2002US-00292849.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Watt AT;
XX
DR WPI; 2004-374981/35.
XX
PT New compound that modulates PIM-1 expression, useful in treating an
PT animal having a disease or condition, i.e. hyperproliferative disorder.
XX
PS Example 15; SEQ ID NO 103; 51pp; English.
XX
CC The invention relates to a compound targeted to a nucleic acid molecule
CC encoding the human PIM-1 polypeptide. The compound is an antisense
CC oligonucleotide that specifically hybridises with the nucleic acid and
CC inhibits expression of the polypeptide. The antisense oligonucleotide
CC comprises at least one modified internucleoside linkage i.e. a
CC phosphorothioate linkage, at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC comprising a 5-methylcytosine. The antisense compounds are useful for
CC modulating the expression of the human PIM-1 polypeptide and in
CC preparation of a composition for treating hyperproliferative disorders,
CC e.g. cancer. This sequence represents a human PIM-1 DNA antisense
CC oligonucleotide target region of the invention.
XX
SQ Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 966 GGTGCTACACCGAGACCTC 984
|||||| ||||| ||| ||
Db 2 GGTGCTCCACCGCGACATC 20

RESULT 1150
ADN61576
ID ADN61576 standard; DNA; 20 BP.
XX
AC ADN61576;
XX
DT 29-JUL-2004 (first entry)
XX
DE Fungi, oomycete and plant general hybridisation primer B SEQ ID NO:30.
XX
KW detection; fungal infection; soil fungal infection;
KW vegetable fungal infection; pathogenic fungus; Microcentrospora acerina;
KW Fibularhizoctonia carotae; Pythium; hybridisation; primer; ss.
XX
OS Synthetic.
XX
PN WO2004040017-A2.
XX
PD 13-MAY-2004.
XX
PF 31-OCT-2003; 2003WO-GB004712.
XX
PR 01-NOV-2002; 2002GB-00025550.
PR 01-NOV-2002; 2002GB-00025551.
XX
PA (CARR-) CARROTECH AS.
PA (COCK/) COCKBAIN J R M.
XX
PI Hermansen A, Klemsdal S, Naerstad R, Wanner L, Lund G;
XX
DR WPI; 2004-376207/35.
XX
PT Detecting fungal infection of soil or vegetables by Microcentrospora
PT acerina, Fibularhizoctonia carotae or Pythium species by treating the
PT sample of soil or vegetable and effecting a PCR on DNA released by lysis
PT of the fungal cells.
XX
PS Disclosure; SEQ ID NO 30; 44pp; English.
XX
CC The present invention describes an assay for detecting fungal infection
CC of soil or vegetables by pathogenic fungal species, particularly
CC Microcentrospora acerina, Fibularhizoctonia carotae or Pythium species.
CC The assay comprises: (1) obtaining a sample of soil or vegetable; (2)
CC treating the sample to lyse fungal cells; (3) effecting a PCR on DNA
CC released by lysis of the fungal cells, using an oligonucleotide primer
CC pair; and (4) detecting DNA fragments generated by the PCR. Also
CC described: (1) an 18-24-mer oligonucleotide primer hybridisable to an
CC oligonucleotide sequence selected from SEQ ID NO:1 to 28; (2) a substrate
CC having immobilised on it the 18-24-mer oligonucleotide primer; (3) a
CC primer composition comprising a pair of 18-24-mer oligonucleotide primers
CC ; (4) a kit for performing the assay method, for nucleic acid extraction
CC from soil or for pathogen DNA extraction from host vegetable tissue; (5)
CC extracting nucleic acid from the soil; and (6) extracting pathogen DNA
CC from host vegetable tissue. The assay is useful for detecting fungal
CC infection of soil or vegetables by pathogenic fungal species,
CC particularly Microcentrospora acerina, Fibularhizoctonia carotae or
CC Pythium species. The present sequence represents a general primer which
CC can hybridise to DNA from all fungi, all oomycetes and all plants, which
CC is given in the exemplification of the present invention.
XX
SQ Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1549 CTTCGGTCTTCGTCGATGC 1567
|| || ||||| |||||||
Db 2 CTGCGTTCTTCATCGATGC 20

RESULT 1151
ADN61577/c
ID ADN61577 standard; DNA; 20 BP.
XX
AC ADN61577;
XX
DT 29-JUL-2004 (first entry)
XX
DE Fungi, oomycete and plant general hybridisation primer C SEQ ID NO:31.
XX
KW detection; fungal infection; soil fungal infection;
KW vegetable fungal infection; pathogenic fungus; Microcentrospora acerina;
KW Fibularhizoctonia carotae; Pythium; hybridisation; primer; ss.
XX
OS Synthetic.
XX
PN WO2004040017-A2.
XX
PD 13-MAY-2004.
XX
PF 31-OCT-2003; 2003WO-GB004712.
XX
PR 01-NOV-2002; 2002GB-00025550.
PR 01-NOV-2002; 2002GB-00025551.
XX
PA (CARR-) CARROTECH AS.

```
PA   (COCK/) COCKBAIN J R M.
XX
PI   Hermansen A,  Klemsdal S,  Naerstad R,  Wanner L,  Lund G;
XX
DR   WPI; 2004-376207/35.
XX
PT   Detecting fungal infection of soil or vegetables by Microcentrospora
PT   acerina, Fibularhizoctonia carotae or Pythium species by treating the
PT   sample of soil or vegetable and effecting a PCR on DNA released by lysis
PT   of the fungal cells.
XX
PS   Disclosure; SEQ ID NO 31; 44pp; English.
XX
CC   The present invention describes an assay for detecting fungal infection
CC   of soil or vegetables by pathogenic fungal species, particularly
CC   Microcentrospora acerina, Fibularhizoctonia carotae or Pythium species.
CC   The assay comprises: (1) obtaining a sample of soil or vegetable; (2)
CC   treating the sample to lyse fungal cells; (3) effecting a PCR on DNA
CC   released by lysis of the fungal cells, using an oligonucleotide primer
CC   pair; and (4) detecting DNA fragments generated by the PCR. Also
CC   described: (1) an 18-24-mer oligonucleotide primer hybridisable to an
CC   oligonucleotide sequence selected from SEQ ID NO:1 to 28; (2) a substrate
CC   having immobilised on it the 18-24-mer oligonucleotide primer; (3) a
CC   primer composition comprising a pair of 18-24-mer oligonucleotide primers
CC   ; (4) a kit for performing the assay method, for nucleic acid extraction
CC   from soil or for pathogen DNA extraction from host vegetable tissue; (5)
CC   extracting nucleic acid from the soil; and (6) extracting pathogen DNA
CC   from host vegetable tissue. The assay is useful for detecting fungal
CC   infection of soil or vegetables by pathogenic fungal species,
CC   particularly Microcentrospora acerina, Fibularhizoctonia carotae or
CC   Pythium species. The present sequence represents a general primer which
CC   can hybridise to DNA from all fungi, all oomycetes and all plants, which
CC   is given in the exemplification of the present invention.
XX
SQ   Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1549 CTTCGGTCTTCGTCGATGC 1567
              || || ||||| |||||||
Db         19 CTGCGTTCTTCATCGATGC 1

RESULT 1152
ADP76544/c
ID   ADP76544 standard; DNA; 20 BP.
XX
AC   ADP76544;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Chimeric phosphorothioate oligonucleotide #343.
XX
KW   GFAT; Antidiabetic; Cardiant;
KW   Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
KW   reperfusion; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .4
FT                   /*tag=  a
FT                   /mod_base= other
FT                   /note= "2-methoxyethyl wing"
FT   modified_base   17. .20
FT                   /*tag=  b
FT                   /mod_base= other
FT                   /note= "2-methoxyethyl wing"
XX
PN   WO2004035763-A2.
XX
PD   29-APR-2004.
XX
PF   02-OCT-2003; 2003WO-US033332.
XX
PR   17-OCT-2002; 2002US-0419268P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Broschat KO,  Crosby SD;
XX
DR   WPI; 2004-348453/32.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
PT   (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
PT   ischemia/reperfusion injury.
XX
PS   Claim 4; SEQ ID NO 343; 175pp; English.
XX
CC   The present invention relates to a compound which specifically hybridizes
CC   with a nucleic acid molecule encoding GFAT, and inhibits the expression
CC   of GFAT. Specifically claimed are antisense oligonucleotides capable of
CC   modulating the expression of GFAT, and which comprise any of the 3063
CC   sequences of 20 base pairs, given in the specification. The compound,
CC   composition and methods are useful for treating a disease or condition
CC   associated with GFAT, such as a disease or condition, e.g. diabetes, a
CC   cardiovascular or neurological disorder, ischemia/reperfusion injury.
CC   They are also useful in research and diagnostics for modulating the
CC   expression of GFAT. The present sequence represents a chimeric
CC   phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
CC   oligonucleotides inhibit human GFAT expression.
XX
SQ   Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       131 GGATGAAGAAGATCAAACG 149
             ||||||||||| ||| | |
Db        19 GGATGAAGAAGTTCACAAG 1

RESULT 1153
ADP76350/c
ID   ADP76350 standard; DNA; 20 BP.
XX
AC   ADP76350;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Chimeric phosphorothioate oligonucleotide #149.
XX
KW   GFAT; Antidiabetic; Cardiant;
KW   Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
KW   reperfusion; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .4
FT                   /*tag=  a
FT                   /mod_base= other
FT                   /note= "2-methoxyethyl wing"
FT   modified_base   17. .20
FT                   /*tag=  b
FT                   /mod_base= other
FT                   /note= "2-methoxyethyl wing"
XX
PN   WO2004035763-A2.
XX
PD   29-APR-2004.
XX
```

```
PF   02-OCT-2003; 2003WO-US033332.
XX
PR   17-OCT-2002; 2002US-0419268P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Broschat KO,  Crosby SD;
XX
DR   WPI; 2004-348453/32.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
PT   (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
PT   ischemia/reperfusion injury.
XX
PS   Claim 4; SEQ ID NO 149; 175pp; English.
XX
CC   The present invention relates to a compound which specifically hybridizes
CC   with a nucleic acid molecule encoding GFAT, and inhibits the expression
CC   of GFAT. Specifically claimed are antisense oligonucleotides capable of
CC   modulating the expression of GFAT, and which comprise any of the 3063
CC   sequences of 20 base pairs, given in the specification. The compound,
CC   composition and methods are useful for treating a disease or condition
CC   associated with GFAT, such as a disease or condition, e.g. diabetes, a
CC   cardiovascular or neurological disorder, ischemia/reperfusion injury.
CC   They are also useful in research and diagnostics for modulating the
CC   expression of GFAT. The present sequence represents a chimeric
CC   phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
CC   oligonucleotides inhibit human GFAT expression.
XX
SQ   Sequence 20 BP; 3 A; 6 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        131 GGATGAAGAAGATCAAACG 149
              ||||||||||| ||| | |
Db         20 GGATGAAGAAGTTCACAAG 2


RESULT 1154
ADO44487/c
ID   ADO44487 standard; DNA; 20 BP.
XX
AC   ADO44487;
XX
DT   12-AUG-2004  (first entry)
XX
DE   4F2 gene measuring reverse primer.
XX
KW   SF-25 antigen; magnetic bead; cancer; cancer diagnosis; PCR; primer; 4F2;
KW   ss.
XX
OS   Synthetic.
XX
PN   WO2004042401-A1.
XX
PD   21-MAY-2004.
XX
PF   07-NOV-2003; 2003WO-JP014201.
XX
PR   08-NOV-2002; 2002JP-00326193.
XX
PA   (TAKA/) TAKAHASHI H.
PA   (HANA/) HANADA S.
XX
PI   Takahashi H,  Hanada S,  Mitsunaga M;
XX
DR   WPI; 2004-419769/39.
XX
PT   Examining cancer cells through isolation of such cells expressing SF-25
PT   antigen on cell surface for bonding to magnetic beads with antigen-
PT   antibody reaction, applicable in diagnosis of cancer including leukemia.
XX
PS   Example 4; SEQ ID NO 16; 33pp; Japanese.
XX
CC   The invention relates to detecting cancer cells and involves isolating
CC   cancer cells expressing SF-25 antigen on cell surface from a living body
CC   for bonding to magnetic beads with use of antigen-antibody reaction of
CC   the cancer cell and anti SF-25 antibody or its antigen-binding fragment,
CC   collecting the beads and examining the bound cancer cells. The method is
CC   for examining cancer cells, which is applicable in diagnosis of cancer
CC   including leukemia. The method is convenient and efficient, without
CC   needing any special equipment like cell sorters. The present sequence
CC   represents a PCR primer used in measuring the expression level of the 4F2
CC   gene.
XX
SQ   Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        208 GAGCAGATAGGCCTGGATG 226
              ||  |||| ||||||||||
Db         20 GATGAGATTGGCCTGGATG 2


RESULT 1155
ADO32972/c
ID   ADO32972 standard; DNA; 20 BP.
XX
AC   ADO32972;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 420.
XX
KW   apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW   antilipaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW   anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW   neuroprotective; nootropic; lipid; cholesterol metabolism;
KW   hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW   Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW   sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW   anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW   impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW   obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW   phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT                   16-20 2'-MOE wing bases, all cytidine residues are 5-
FT                   methylcytidines"
XX
PN   WO2004044181-A2.
XX
PD   27-MAY-2004.
XX
PF   13-NOV-2003; 2003WO-US036411.
XX
PR   13-NOV-2002; 2002US-0426234P.
PR   15-MAY-2003; 2003WO-US015493.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke R,  Graham M,  Lemonidis-Tarbet K,  Dobie KW;
XX
DR   WPI; 2004-420321/39.
XX
```

```
PT   Antisense oligonucleotide compound that inhibits expression of mRNA
PT   encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT   diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT   syndrome.
XX
PS   Example 33; SEQ ID NO 420; 483pp; English.
XX
CC   The invention relates to a novel antisense compound where the compound
CC   hybridises to and inhibits expression of mRNA encoding human
CC   apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC   confluent HepG2 cells in culture at a concentration of 150 nM. The
CC   compound of the invention demonstrates cardiovascular,
CC   antiarteriosclerotic, antilipaemic, antidiabetic, anorectic, cardiant,
CC   vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
CC   endocrine, vasotropic, neuroprotective and nootropic activities and may
CC   be useful for inhibiting the expression of apolipoprotein B in cells or
CC   tissues in vivo in order to address a condition associated with abnormal
CC   lipid or cholesterol metabolism. The compound may be useful for
CC   decreasing circulating lipoprotein levels, triglyceride levels,
CC   cholesterol levels, lipid levels, fatty acid levels, acute phase
CC   reactants and chylomicrons and thus may be utilised during treatment of
CC   hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC   cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC   syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC   anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC   impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC   diabetes, obesity and atherosclerosis. The current sequence is that of an
CC   antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC   targeted to human ApoB RNA.
XX
SQ   Sequence 20 BP; 9 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        583 CTATCTGAGATTGGCTTTG 601
              || ||| |||||||||| |
Db         19 CTTTCTCAGATTGGCTTGG 1


RESULT 1156
ADO32680/c
ID   ADO32680 standard; DNA; 20 BP.
XX
AC   ADO32680;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Antisense 2'-MOE gapmer oligo targeted to human ApoB RNA - SEQ 128.
XX
KW   apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW   antilipaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW   anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW   neuroprotective; nootropic; lipid; cholesterol metabolism;
KW   hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW   Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW   sexual ateliotic dwarfism; hyperthyroidism; hypertension;
KW   anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW   impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW   obesity; atherosclerosis; antisense; 2'-MOE gapmer; 2'-methoxyethyl wing;
KW   phosphorothioate backbone; human; chromosome 2p23-2p24; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER = Phosphorothioate backbone, bases 1-5 and
FT                    16-20 2'-MOE wing bases, all cytidine residues are 5-
FT                    methylcytidines"
XX
PN   WO2004044181-A2.
XX
PD   27-MAY-2004.
XX
PF   13-NOV-2003; 2003WO-US036411.
XX
PR   13-NOV-2002; 2002US-0426234P.
PR   15-MAY-2003; 2003WO-US015493.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke R,  Graham M,  Lemonidis-Tarbet K,  Dobie KW;
XX
DR   WPI; 2004-420321/39.
XX
PT   Antisense oligonucleotide compound that inhibits expression of mRNA
PT   encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT   diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT   syndrome.
XX
PS   Example 29; SEQ ID NO 128; 483pp; English.
XX
CC   The invention relates to a novel antisense compound where the compound
CC   hybridises to and inhibits expression of mRNA encoding human
CC   apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC   confluent HepG2 cells in culture at a concentration of 150 nM. The
CC   compound of the invention demonstrates cardiovascular,
CC   antiarteriosclerotic, antilipaemic, antidiabetic, anorectic, cardiant,
CC   vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
CC   endocrine, vasotropic, neuroprotective and nootropic activities and may
CC   be useful for inhibiting the expression of apolipoprotein B in cells or
CC   tissues in vivo in order to address a condition associated with abnormal
CC   lipid or cholesterol metabolism. The compound may be useful for
CC   decreasing circulating lipoprotein levels, triglyceride levels,
CC   cholesterol levels, lipid levels, fatty acid levels, acute phase
CC   reactants and chylomicrons and thus may be utilised during treatment of
CC   hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC   cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC   syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC   anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC   impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC   diabetes, obesity and atherosclerosis. The current sequence is that of an
CC   antisense 2'-MOE (2'-methoxyethyl) gapmer oligo of the invention which is
CC   targeted to human ApoB RNA.
XX
SQ   Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1012 AGGGGAGAGCTCAAGCTGG 1030
              |||   ||||||||||||||
Db         19 AGGTATGAGCTCAAGCTGG 1


RESULT 1157
ADO33069
ID   ADO33069 standard; DNA; 20 BP.
XX
AC   ADO33069;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Human apolipoprotein B (ApoB) antisense therapy target DNA - SEQ 517.
XX
KW   apolipoprotein B; ApoB; cardiovascular; antiarteriosclerotic;
KW   antilipaemic; antidiabetic; anorectic; cardiant; vasotropic; hypotensive;
KW   anabolic; eating disorder; cytostatic; endocrine; vasotropic;
KW   neuroprotective; nootropic; lipid; cholesterol metabolism;
KW   hyperlipoproteinaemia; hyperlipidaemia; hypercholesterolaemia;
KW   Von Gierke's disease; lipodystrophy; Cushing's syndrome;
KW   sexual ateliotic dwarfism; hyperthyroidism; hypertension;
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```
KW   anorexia nervosa; Werner's syndrome; hepatoma; multiple myeloma; uraemia;
KW   impotence; obstructive liver disease; Alzheimer's; dementia; diabetes;
KW   obesity; atherosclerosis; human; chromosome 2p23-2p24; ds;
KW   antisense target.
XX
OS   Homo sapiens.
XX
PN   WO2004044181-A2.
XX
PD   27-MAY-2004.
XX
PF   13-NOV-2003; 2003WO-US036411.
XX
PR   13-NOV-2002; 2002US-0426234P.
PR   15-MAY-2003; 2003WO-US015493.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke R,  Graham M,  Lemonidis-Tarbet K,  Dobie KW;
XX
DR   WPI; 2004-420321/39.
XX
PT   Antisense oligonucleotide compound that inhibits expression of mRNA
PT   encoding human apolipoprotein B, useful for treating hyperlipidemia,
PT   diabetes, obesity, von Gierke's disease, lipodystrophies, Cushing's
PT   syndrome.
XX
PS   Example 36; SEQ ID NO 517; 483pp; English.
XX
CC   The invention relates to a novel antisense compound where the compound
CC   hybridises to and inhibits expression of mRNA encoding human
CC   apolipoprotein B (ApoB) after 16-24 hours by at least 30% in 80%
CC   confluent HepG2 cells in culture at a concentration of 150 nM. The
CC   compound of the invention demonstrates cardiovascular,
CC   antiarteriosclerotic, antilipaemic, antidiabetic, anorectic, cardiant,
CC   vasotropic, hypotensive, anabolic, eating disorder-related, cytostatic,
CC   endocrine, vasotropic, neuroprotective and nootropic activities and may
CC   be useful for inhibiting the expression of apolipoprotein B in cells or
CC   tissues in vivo in order to address a condition associated with abnormal
CC   lipid or cholesterol metabolism. The compound may be useful for
CC   decreasing circulating lipoprotein levels, triglyceride levels,
CC   cholesterol levels, lipid levels, fatty acid levels, acute phase
CC   reactants and chylomicrons and thus may be utilised during treatment of
CC   hyperlipoproteinaemia, hyperlipidaemia, hypercholesterolaemia,
CC   cardiovascular disorders, Von Gierke's disease, lipodystrophy, Cushing's
CC   syndrome, sexual ateliotic dwarfism, hyperthyroidism, hypertension,
CC   anorexia nervosa, Werner's syndrome, hepatoma, multiple myeloma, uraemia,
CC   impotence, obstructive liver disease, Alzheimer's disease, dementia,
CC   diabetes, obesity and atherosclerosis. The current sequence is that of a
CC   human apolipoprotein B (ApoB) antisense therapy target DNA of the
CC   invention. The human ApoB gene is located at chromosome 2p23-2p24.
XX
SQ   Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1012 AGGGGAGAGCTCAAGCTGG 1030
              |||   ||||||||||||
Db          2 AGGTATGAGCTCAAGCTGG 20


RESULT 1158
ADP82137/c
ID   ADP82137 standard; DNA; 20 BP.
XX
AC   ADP82137;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Human DR1-associated protein 1 antisense oligonucleotide ISIS #171285.
XX
KW   DR1-associated protein 1; DRAP1; negative cofactor 2 alpha; NC2-alpha;
KW   developmental disorder; therapy; human; antisense;
KW   phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone where all cytidines are
FT                    5-methyl cytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "2' -methoxyethyl nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2' -methoxyethyl nucleotides"
XX
PN   US2004110703-A1.
XX
PD   10-JUN-2004.
XX
PF   10-DEC-2002; 2002US-00317279.
XX
PR   10-DEC-2002; 2002US-00317279.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Chiang M,  Dobie KW;
XX
DR   WPI; 2004-440383/41.
XX
PT   New compounds, particularly oligonucleotides targeted to a nucleic acid
PT   encoding DR1-associated protein 1, useful for treating diseases
PT   associated with DR1-associated protein 1, e.g. developmental disorders.
XX
PS   Example 15; SEQ ID NO 16; 33pp; English.
XX
CC   The present sequence is directed to antisense oligonucleotides targeted
CC   to DR1-associated protein 1 [also known as DRAP1 and negative cofactor 2
CC   alpha (NC2-alpha)] and which modulates to the expression of DR1-
CC   associated protein 1. The invention is useful for treating a disease or
CC   condition associated with DR1-associated protein 1 such as a
CC   developmental disorder. The present sequence is human DR1-associated
CC   protein 1 antisense oligonucleotide. This sequence is used in the
CC   exemplification of the invention.
XX
SQ   Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         46 GGACCAGCAGTGTGACTGC 64
              ||| ||||||| ||||| |
Db         19 GGAGCAGCAGTTTGACTTC 1


RESULT 1159
ADO23289/c
ID   ADO23289 standard; DNA; 20 BP.
XX
AC   ADO23289;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Nucleic acid amplification method related competitor DNA #1.
XX
KW   nucleic acid amplification; hybridisation; microarray; diagnosis;
```

```
KW   genetic analysis; single-nucleotide polymorphism analysis;
KW   microorganism detection; viral pathogen detection;
KW   real-time quantitative PCR; ss.
XX
OS   Unidentified.
XX
PN   WO2004046378-A2.
XX
PD   03-JUN-2004.
XX
PF   18-NOV-2003; 2003WO-EP012905.
XX
PR   19-NOV-2002; 2002DE-01053966.
XX
PA   (CLON-) CLONDIAG CHIP TECHNOLOGIES GMBH.
XX
PI   Ermantraut E,  Bickel R,  Ellinger T,  Wagenhaus A;
XX
DR   WPI; 2004-420638/39.
XX
PT   Efficient amplification of template nucleic acid, useful e.g. for genetic
PT   analysis or detecting microorganisms, uses a competitor that inhibits
PT   amplification of one template strand.
XX
PS   Example 10; Page 103; 142pp; German.
XX
CC   The invention describes the efficient amplification of at least one
CC   template nucleic acid (A) comprising PCR amplification, in the presence,
CC   from the start, of a competitor (I) that inhibits formation of one of the
CC   template strands amplified by PCR. Also described is a method for
CC   detecting at least one nucleic acid (NA) comprising amplification by the
CC   new process then detecting the amplification product by hybridisation
CC   with a complementary probe. The method is used to amplify nucleic acids
CC   for subsequent detection by hybridisation, particularly in a microarray
CC   format, e.g. for diagnosis, especially genetic analysis; analysis of
CC   single-nucleotide polymorphisms; detection of microorganisms and/or of
CC   viral pathogens. It can also be used for real-time quantitative PCR (by
CC   cyclic repetition of the amplification and hybridisation steps). The
CC   method provides quantitative, microarray-based analysis; involves fewer
CC   steps (amplification and detection are done as a continuous process) and
CC   has a lower error rate. The process can be done in a closed vessel and
CC   provides a small, easily handled, system for point-of-care diagnosis.
CC   Although (I) reduces the amount of amplification product formed, it
CC   increases the hybridisation signal. This sequence represents an
CC   oligonucleotide associated with the amplification method of the
CC   invention.
XX
SQ   Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1549 CTTCGGTCTTCGTCGATGC 1567
              || || ||||| |||||||
Db         19 CTGCGTTCTTCATCGATGC 1


RESULT 1160
ADO23287/c
ID   ADO23287 standard; DNA; 20 BP.
XX
AC   ADO23287;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Nucleic acid amplification method associated primer #5.
XX
KW   nucleic acid amplification; hybridisation; microarray; diagnosis;
KW   genetic analysis; single-nucleotide polymorphism analysis;
KW   microorganism detection; viral pathogen detection;
KW   real-time quantitative PCR; primer; ss.
XX
OS   Unidentified.
XX
PN   WO2004046378-A2.
XX
PD   03-JUN-2004.
XX
PF   18-NOV-2003; 2003WO-EP012905.
XX
PR   19-NOV-2002; 2002DE-01053966.
XX
PA   (CLON-) CLONDIAG CHIP TECHNOLOGIES GMBH.
XX
PI   Ermantraut E,  Bickel R,  Ellinger T,  Wagenhaus A;
XX
DR   WPI; 2004-420638/39.
XX
PT   Efficient amplification of template nucleic acid, useful e.g. for genetic
PT   analysis or detecting microorganisms, uses a competitor that inhibits
PT   amplification of one template strand.
XX
PS   Example 10; Page 103; 142pp; German.
XX
CC   The invention describes the efficient amplification of at least one
CC   template nucleic acid (A) comprising PCR amplification, in the presence,
CC   from the start, of a competitor (I) that inhibits formation of one of the
CC   template strands amplified by PCR. Also described is a method for
CC   detecting at least one nucleic acid (NA) comprising amplification by the
CC   new process then detecting the amplification product by hybridisation
CC   with a complementary probe. The method is used to amplify nucleic acids
CC   for subsequent detection by hybridisation, particularly in a microarray
CC   format, e.g. for diagnosis, especially genetic analysis; analysis of
CC   single-nucleotide polymorphisms; detection of microorganisms and/or of
CC   viral pathogens. It can also be used for real-time quantitative PCR (by
CC   cyclic repetition of the amplification and hybridisation steps). The
CC   method provides quantitative, microarray-based analysis; involves fewer
CC   steps (amplification and detection are done as a continuous process) and
CC   has a lower error rate. The process can be done in a closed vessel and
CC   provides a small, easily handled, system for point-of-care diagnosis.
CC   Although (I) reduces the amount of amplification product formed, it
CC   increases the hybridisation signal. This sequence represents a primer
CC   associated with the amplification method of the invention.
XX
SQ   Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 8.7e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1549 CTTCGGTCTTCGTCGATGC 1567
              || || ||||| |||||||
Db         19 CTGCGTTCTTCATCGATGC 1


RESULT 1161
ADP84331/c
ID   ADP84331 standard; DNA; 20 BP.
XX
AC   ADP84331;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Rev PCR primer used for sequencing exon 2b.1 boundary of human GPRA DNA.
XX
KW   ss; AST-1; asthma; IgE mediated disease; human; GPRA;
KW   G-protein coupled receptor for asthma susceptibility; AAA1;
KW   asthma associated alternatively spliced gene 1; primer; PCR;
KW   chronic obstructive pulmonary disease; cancer; rhinitis; dermatitis;
KW   cytostatic; antiasthmatic; transgenic; asthma locus-1.
XX
OS   Homo sapiens.
XX
PN   WO2004056866-A1.
XX
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PD 08-JUL-2004.
XX
PF 19-DEC-2003; 2003WO-FI000973.
XX
PR 20-DEC-2002; 2002US-0435846P.
PR 03-JAN-2003; 2003US-0437895P.
PR 26-MAR-2003; 2003US-0458767P.
PR 09-JUL-2003; 2003US-0486000P.
XX
PA (GENE-) GENEOS OY.
XX
PI Laitinen T, Kere J, Laitinen LA, Polvi A, Maekelae S, Vendelin J;
PI Pulkkinen V, Salmikangas P;
XX
DR WPI; 2004-500286/47.
XX
PT New GPRA polypeptides, useful in preparing a composition for diagnosing,
PT treating or preventing asthma, other IgE-mediated disease, chronic
PT obstructive pulmonary disease or cancer.
XX
PS Example 7; Page 76; 265pp; English.
XX
CC This invention relates to the identification of a novel susceptibility
CC locus AST-1 for asthma and other IgE mediated diseases mapped to the
CC human chromosome 7p14-p15. Specifically, it refers to two overlapping
CC genes namely GPRA (G-protein coupled receptor for asthma susceptibility)
CC and AAA1 (asthma associated alternatively spliced gene 1). The present
CC invention describes identifying single nucleotide polymorphisms, as well
CC as insertion or deletion polymorphisms, occurring at different positions
CC in the AST-1 locus, and furthermore providing vectors, host cells,
CC primers and probes in order to determine the status of an individual.
CC Accordingly, it provides a kit to diagnose or assess predisposition to
CC asthma, chronic obstructive pulmonary disease or cancer and other IgE
CC mediated diseases including rhinitis and dermatitis, such that derived
CC pharmaceutical compositions exhibit cytostatic and antiasthmatic
CC activities. Furthermore, it provides a transgenic animal comprising the
CC asthma locus-1 (AST-1) DNA. This oligonucleotide sequence is a PCR primer
CC used to sequence the exon and exon/ intron boundaries of human GPRA DNA,
CC given in table 5 of the invention.
XX
SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 210 GCAGATAGGCCTGGATGAG 228
||| ||| ||||||||||
Db 20 GCAAATATCCCTGGATGAG 2

RESULT 1162
AAQ51806
ID AAQ51806 standard; DNA; 21 BP.
XX
AC AAQ51806;
XX
DT 20-DEC-1993 (first entry)
XX
DE Encodes ballast constituent in pINT69d pro-insulin fusion protein.
XX
KW Fusion protein; ballast constituent; monkey pro-insulin; increased;
KW recombinant protein production; HMG CoA reductase;
KW human 3-hydroxy-3-methylglutaryl-coenzyme A-reductase;
KW mixed oligonucleotide; ds.
XX
OS Synthetic.
XX
PN US5227293-A.
XX
PD 13-JUL-1993.
XX
PF 23-APR-1992; 92US-00838221.
XX
PR 29-AUG-1989; 89US-00399874.
PR 28-AUG-1990; 90WO-US004840.
XX
PA (GEHO) GEN HOSPITAL CORP.
PA (FARH) HOECHST AG.
XX
PI Stengelin S, Ulmer W, Habermann P, Uhlmann E, Seed B;
XX
DR WPI; 1991-102070/14.
DR P-PSDB; AAR44307.
XX
PT Prepn. of fusion proteins contg. ballast constituent and protein - giving
PT prods. which are protease resistant or insoluble.
XX
PS Example 8; Col 7-8; 22pp; English.
XX
CC Sequence AAQ51806 is a specific example of the novel generic ballast
CC constituent coding sequence. The invention covers fusion proteins in
CC which a short ballast constituent is fused to a desired protein, esp. to
CC modified pro-insulin, to increase recombinant production of the protein.
CC See AAQ51798-Q51799 and AAQ51802-Q51811
XX
SQ Sequence 21 BP; 10 A; 6 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 885 TGGGAACATCATCAACATG 903
||| |||| |||||||| |
Db 2 TGGCAACAACATCAACACG 20

RESULT 1163
AAQ57291
ID AAQ57291 standard; mRNA; 21 BP.
XX
AC AAQ57291;
XX
DT 25-MAR-2003 (revised)
DT 26-JUL-1994 (first entry)
XX
DE Enzymatic RNA molecule c-myb mRNA target sequence.
XX
KW Specific; cleavage; target RNA; protein; prophylaxis; expression;
KW inhibitor; inhibition; ribozyme; treatment; prevention; psoriasis;
KW asthma; inflammatory diseases; restenosis; cardiovascular condition;
KW hypertension; arthritis; ss.
XX
OS Synthetic.
XX
PN WO9402595-A1.
XX
PD 03-FEB-1994.
XX
PF 02-JUL-1993; 93WO-US006316.
XX
PR 17-JUL-1992; 92US-00916763.
PR 07-DEC-1992; 92US-00987132.
PR 07-DEC-1992; 92US-00989848.
PR 07-DEC-1992; 92US-00989849.
PR 19-JAN-1993; 93US-00008895.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Sullivan SM, Draper KG;
XX
DR WPI; 1994-048853/06.
XX
PT Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
PT inflammatory, arthritic, stenotic or cardiovascular diseases or
PT conditions.

```
XX
PS   Claim 3; Page 20; 65pp; English.
XX
CC   This is a c-myb mRNA target sequence (nucleotide no. 1919) of an
CC   enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the
CC   development or maintenance of a restenotic condition. The concn. of the
CC   ribozyme necessary to effect a therapeutic treatment is lower than that
CC   of an antisense oligonucleotide and the specificity of action is higher.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 21 BP; 4 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        859 GACCTGAAGCAGTACCTGG 877
              | | || ||||||||||||
Db          1 GCCTTGTAGCAGTACCTGG 19


RESULT 1164
AAT42247/c
ID   AAT42247 standard; DNA; 21 BP.
XX
AC   AAT42247;
XX
DT   20-FEB-1997  (first entry)
XX
DE   Primer derived from hlyA gene used in modified PCR method.
XX
KW   Detection; PCR; polymerase chain reaction; hybrid; antibody;
KW   immunochemical detection; ss.
XX
OS   Synthetic.
XX
PN   CA2139070-A.
XX
PD   24-JUN-1996.
XX
PF   23-DEC-1994;   94CA-02139070.
XX
PR   23-DEC-1994;   94CA-02139070.
XX
PA   (BLAI/) BLAIS B W.
XX
PI   Blais BW;
XX
DR   WPI; 1996-413110/42.
XX
PT   Detection of nucleic acid sequences - by polymerase chain reaction
PT   amplification, transcription using RNA polymerase and detection of
PT   RNA:DNA hybrids using antibodies.
XX
PS   Example 1; Page 16; 31pp; English.
XX
CC   A new method for the detection of nucleic acids comprises (a) amplifying
CC   a DNA by PCR using primers to which an appropriate RNA polymerase
CC   promoter has been appended; (b) transcribing the amplified DNA into RNA
CC   using an RNA polymerase; (c) forming RNA:DNA hybrids; and (d)
CC   immunochemically detecting the RNA:DNA hybrids using antibodies directed
CC   to RNA:DNA hybrids. Two primers (AAT42247, AAT42248) were selected from
CC   the hlyA gene and spanned a 730 base pair region of the gene from
CC   nucleotides 602-1332. For further use in the invention, the primer
CC   described in AAT42247 had an additional 26 nucleotides added to it
CC   corresponding to T7 RNA polymerase promoter sequence. The resulting
CC   primer is described in AAT42249
XX
SQ   Sequence 21 BP; 8 A; 1 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1503 TTCCATATTTGCACTAAAG 1521
              |||||| ||| |||||| |
Db         19 TTCCATCTTTCCACTAATG 1


RESULT 1165
ADG77662/c
ID   ADG77662 standard; DNA; 21 BP.
XX
AC   ADG77662;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Canine disease marker-related PCR primer 506.
XX
KW   genetic disease; genetic trait; dog; carrier of recessive disease;
KW   copper toxicosis; CT; canine genome map; breed-specific profile;
KW   DNA fingerprint; dog identification; PCR; primer; ss.
XX
OS   Canis familiaris.
XX
PN   WO9731011-A1.
XX
PD   28-AUG-1997.
XX
PF   18-FEB-1997;   97WO-US002396.
XX
PR   22-FEB-1996;   96US-0012060P.
XX
PA   (UNMI ) UNIV MICHIGAN.
PA   (UNMS ) UNIV MICHIGAN STATE.
XX
PI   Brewer GJ,  Venta PJ,  Yuzbasiyan-Gurkan V;
XX
DR   WPI; 1997-435082/40.
XX
PT   New oligonucleotide primers for diagnosis of genetic diseases and traits
PT   in dogs - amplify specific regions of the genome containing
PT   microsatellite repeats, especially for diagnosing copper toxicosis and
PT   carriers.
XX
PS   Claim 1; Page 16; 40pp; English.
XX
CC   This invention relates to novel oligonucleotide PCR primers which may be
CC   used to identify markers associated with genetic diseases and traits in
CC   dogs, in particular to diagnose genetic diseases that are not
CC   phenotypically visible and to identify carriers of recessive diseases. A
CC   specific application is diagnosis of copper toxicosis (CT). The invention
CC   can also be used to create a genetic map of the canine genome; to
CC   generate breed-specific profiles; to establish paternity and to identify
CC   dogs from DNA fingerprints. The method provides rapid analysis of the
CC   target sequences from only a small sample of DNA. Diagnosis can be done
CC   at any time in the dog's life. The present sequence is that of a PCR
CC   primer of the invention.
XX
SQ   Sequence 21 BP; 7 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        837 TGTCTTTGAGTACCTGGAC 855
              ||||||| |||| ||| ||
Db         20 TGTCTTTAAGTAACTGCAC 2


RESULT 1166
AAV51809
ID   AAV51809 standard; DNA; 21 BP.
XX
AC   AAV51809;
XX
```

```
DT   02-FEB-1999  (first entry)
XX
DE   Zea mays genome reverse PCR primer #105.
XX
KW   Polymorphic marker; allele-specific; probe; amplification; PCR primer;
KW   hybridisation; plant; hybrid certification; genetic contribution;
KW   progeny; back-cross; hybrid; ancestry; corn; ss.
XX
OS   Synthetic.
OS   Zea mays.
XX
PN   WO9824796-A1.
XX
PD   11-JUN-1998.
XX
PF   01-DEC-1997;   97WO-US021782.
XX
PR   02-DEC-1996;   96US-0032069P.
PR   07-MAR-1997;   97US-00813507.
XX
PA   (AFFY-) AFFYMETRIX INC.
XX
PI   Lemieux B,  Landry BS,  Sapolsky RJ,  Murigneux A;
XX
DR   WPI; 1998-333252/29.
XX
PT   Brassica species allele-specific oligonucleotide probes and primers -
PT   useful for plant breeding.
XX
PS   Example 1; Page 51; 65pp; English.
XX
CC   AAV51705-V52008 are reverse PCR primers used to amplify fragments of the
CC   Zea mays genome in order to detect polymorphic markers. Such markers can
CC   be used in the construction of allele-specific primers and probes for
CC   amplification or hybridisation, e.g. to determine common or disparate
CC   ancestry between 2 or more plants, to monitor the genetic contribution of
CC   an ancestral plant, to trace the progeny of proprietary plants, in
CC   certification of a hybrid plant or to identify the progeny of a back-
CC   crossed plant with an ancestral plant
XX
SQ   Sequence 21 BP; 7 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        587 CTGAGATTGGCTTTGGGAA 605
              ||||||||||  ||||  ||
Db          2 CTGAGATTGGATTTGAAAA 20


RESULT 1167
AAV51812
ID   AAV51812 standard; DNA; 21 BP.
XX
AC   AAV51812;
XX
DT   02-FEB-1999  (first entry)
XX
DE   Zea mays genome reverse PCR primer #108.
XX
KW   Polymorphic marker; allele-specific; probe; amplification; PCR primer;
KW   hybridisation; plant; hybrid certification; genetic contribution;
KW   progeny; back-cross; hybrid; ancestry; corn; ss.
XX
OS   Synthetic.
OS   Zea mays.
XX
PN   WO9824796-A1.
XX
PD   11-JUN-1998.
XX
PF   01-DEC-1997;   97WO-US021782.
XX
PR   02-DEC-1996;   96US-0032069P.
PR   07-MAR-1997;   97US-00813507.
XX
PA   (AFFY-) AFFYMETRIX INC.
XX
PI   Lemieux B,  Landry BS,  Sapolsky RJ,  Murigneux A;
XX
DR   WPI; 1998-333252/29.
XX
PT   Brassica species allele-specific oligonucleotide probes and primers -
PT   useful for plant breeding.
XX
PS   Example 1; Page 51; 65pp; English.
XX
CC   AAV51705-V52008 are reverse PCR primers used to amplify fragments of the
CC   Zea mays genome in order to detect polymorphic markers. Such markers can
CC   be used in the construction of allele-specific primers and probes for
CC   amplification or hybridisation, e.g. to determine common or disparate
CC   ancestry between 2 or more plants, to monitor the genetic contribution of
CC   an ancestral plant, to trace the progeny of proprietary plants, in
CC   certification of a hybrid plant or to identify the progeny of a back-
CC   crossed plant with an ancestral plant
XX
SQ   Sequence 21 BP; 7 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        587 CTGAGATTGGCTTTGGGAA 605
              ||||||||||  ||||  ||
Db          2 CTGAGATTGGATTTGAAAA 20


RESULT 1168
AAX09125/c
ID   AAX09125 standard; DNA; 21 BP.
XX
AC   AAX09125;
XX
DT   24-MAR-1999  (first entry)
XX
DE   Human biallelic polymorphic marker upstream primer #5.
XX
KW   Polymorphism; biallelic; human; forensic; paternity testing; disease;
KW   detection; phenotypic typing; characteristic; infection; hereditary;
KW   autoimmune disease; cancer; inflammation; drug; therapy; medicament;
KW   treatment; marker; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9820165-A2.
XX
PD   14-MAY-1998.
XX
PF   05-NOV-1997;   97WO-US020313.
XX
PR   06-NOV-1996;   96US-0030455P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   Lander ES,  Wang D,  Hudson T;
XX
DR   WPI; 1998-286974/25.
XX
PT   New isolated nucleic acid segments from the human genome - used for
PT   determining polymorphic forms for use in e.g. forensics, paternity
PT   testing or phenotypic typing for disease.
XX
PS   Claim 15; Page 46; 310pp; English.
XX
```

```
CC   AAX09121-X10268 are allele-specific oligonucleotide primers used in the
CC   isolation of various biallelic polymorphic markers found in the human
CC   genome (represented in AAX10269-X12937). These primers can be used in a
CC   method for determining polymorphic forms in an individual for use in e.g.
CC   forensics, paternity testing or for phenotypic typing for diseases such
CC   as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC   dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
CC   hypercholesterolemia, polycystic kidney disease, hereditary
CC   spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
CC   haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
CC   syndrome, osteogenesis imperfecta, acute intermittent porphyria,
CC   autoimmune diseases, inflammation, cancer, diseases of the nervous
CC   system, infection by pathogenic microorganisms, and characteristics such
CC   as longevity, appearance (e.g. baldness, obesity), strength, speed,
CC   endurance, fertility, and susceptibility or receptivity to particular
CC   drugs or therapeutic treatments. The isolated polymorphic nucleic acid
CC   segments can also be used to produce medicaments for the treatment or
CC   prophylaxis of such diseases
XX
SQ   Sequence 21 BP; 7 A; 2 C; 10 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1678 CCCAACTACATCTTCCCTG 1696
              | | ||||| |||||||||
Db         21 CTCCACTACCTCTTCCCTG 3


RESULT 1169
AAV08249
ID   AAV08249 standard; DNA; 21 BP.
XX
AC   AAV08249;
XX
DT   27-JAN-1999  (first entry)
XX
DE   PCR primer ABCR.EXON31:F for ABCR coding sequence.
XX
KW   ATP binding cassette; ABC transporter; ABCR; Stargardt Disease; therapy;
KW   Fundus Flavimaculatus; age-related macular degeneration; diagnosis;
KW   PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9837764-A1.
XX
PD   03-SEP-1998.
XX
PF   27-FEB-1998;   98WO-US003895.
XX
PR   27-FEB-1997;   97US-0039388P.
XX
PA   (BAYU ) BAYLOR COLLEGE MEDICINE.
PA   (UYJO ) UNIV JOHNS HOPKINS.
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PA   (UTAH ) UNIV UTAH.
XX
PI   Allikmets R,  Anderson KL,  Dean M,  Leppart M,  Lewis RA,  Li Y;
PI   Lupski JR,  Nathans J,  Rattner A,  Shroyer NF,  Singh N,  Smallwood PM;
PI   Sun H;
XX
DR   WPI; 1998-495375/42.
XX
PT   Retina-specific ATP-binding cassette transporter and DNA - useful for,
PT   e.g. diagnosis and treatment of macular degeneration, such as in
PT   Stargardt Disease, Fundus Flavimaculatus and age-related degeneration.
XX
PS   Claim 41; Page 30; 79pp; English.
XX
CC   This sequence represents a PCR primer for DNA encoding the human retina
CC   specific ATP binding cassette transporter (ABCR) of the invention. ABCR
CC   may be used in compositions for screening agents that alters ABCR. The
CC   agent can inhibit Stargardt Disease, Fundus Flavimaculatus and age-
CC   related macular degeneration (MD). Primers (such as this sequence) and
CC   probes for the ABCR DNA can be used in a diagnostic kit for detecting MD
XX
SQ   Sequence 21 BP; 6 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1389 CCTCACCAAGCTGTTGCAG 1407
              | ||||| ||||||| |||
Db          3 CATCACCCAGCTGTTCCAG 21


RESULT 1170
AAV62007/c
ID   AAV62007 standard; DNA; 21 BP.
XX
AC   AAV62007;
XX
DT   25-MAR-2003  (revised)
DT   11-JAN-1999  (first entry)
XX
DE   L monocytogenes hlyA gene PCR primer A.
XX
KW   Detection; pathogen; amplification; RNA enhancement product; PCR primer;
KW   DNA/RNA hybrid; Listeria sp; Streptococcus sp; Lactobacillus sp;
KW   Lactococcus sp; Micrococcus sp; Enterococcus sp; Stapylococcus sp;
KW   Bacillus sp; Pseudomonas sp; Escherichia coli; Salmonella typhimurium;
KW   Yersinia enterocolitica; ss.
XX
OS   Synthetic.
OS   Listeria monocytogenes.
XX
PN   US5827661-A.
XX
PD   27-OCT-1998.
XX
PF   23-SEP-1996;   96US-00718596.
XX
PR   23-DEC-1994;   94CA-02137070.
PR   30-DEC-1994;   94US-00366619.
XX
PA   (KALY-) KALYX BIOSCIENCES INC.
XX
PI   Blais BW;
XX
DR   WPI; 1998-593985/50.
XX
PT   Enhanced detection by nucleic acid amplification, especially of Listeria
PT   - uses formation of DNA-RNA hybrids after amplification, and then
PT   specific immuno-detection of these.
XX
PS   Example 1; Col 12; 15pp; English.
XX
CC   AAV62007-V62009 are PCR primers used in a novel method for the enhanced
CC   detection of DNA sequences, via a nucleic acid amplification procedure,
CC   especially for detecting pathogens. Minute samples of pathogens (c. 10
CC   cells) cannot be detected effectively by PCR. The minute quantities of
CC   product formed by PCR are then transcribed into RNA enhancement products,
CC   which further amplifies the target sequences to detectable levels.
CC   Detection then takes place with antibodies for DNA:RNA hybrids, which
CC   enable detection if the product volume formed is still small, but is
CC   specific enough just for this type of product. The method is especially
CC   useful for detecting the following pathogens: Listeria monocytogenes, L.
CC   innocua, L. ivanovii, L. seeligeri, L. welshimeri, L. murrayi, L. grayi,
CC   Streptococcus thermophillus, Lactobacillus casei, Lactococcus lactis,
CC   Micrococcus luteus, Enterococcus faecalis, Staphylococcus epidermidis,
CC   Bacillus cereus, Bacillus subtilis, Pseudomonas aeruginosa, Escherichia
CC   coli, Salmonella typhimurium, or Yersinia enterocolitica. (Updated on 25-
```

```
CC   MAR-2003 to correct PR field.)
XX
SQ   Sequence 21 BP; 8 A; 1 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1503 TTCCATATTTGCACTAAAG 1521
              |||||| ||| |||||| |
Db         19 TTCCATCTTTCCACTAATG 1


RESULT 1171
AAZ26124
ID   AAZ26124 standard; DNA; 21 BP.
XX
AC   AAZ26124;
XX
DT   30-NOV-1999  (first entry)
XX
DE   Human polymorphic region 313.
XX
KW   Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
KW   cell viability; loss of heterozygosity; precancerous condition; ASI;
KW   allele specific inhibitor; somatic cell; diagnosis; prevention;
KW   atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
KW   dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
KW   graft versus host disease; malignant cell removal; bone marrow; ss.
XX
OS   Homo sapiens.
XX
PN   WO9841648-A2.
XX
PD   24-SEP-1998.
XX
PF   19-MAR-1998;   98WO-US005419.
XX
PR   20-MAR-1997;   97US-0041057P.
XX
PA   (VARI-) VARIAGENICS INC.
XX
PI   Housman D,  Ledley FD,  Stanton VP;
XX
DR   WPI; 1998-521232/44.
XX
PT   Identifying target genes for allele-specific drugs - used for diagnosis,
PT   prevention and treatment of, e.g. cancers, atherosclerotic plaque,
PT   dysplastic lesions, endometriosis or graft versus host disease.
XX
PS   Disclosure; Fig 7; 605pp; English.
XX
CC   This invention describes a novel method for identifying an inhibitor
CC   potentially useful for treatment of cancer, where the inhibitor is active
CC   on a gene vital for cell growth or viability, and where the gene is
CC   subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
CC   used for preventing the development of cancer in a patient having a
CC   precancerous condition, by administering to the patient a first allele
CC   specific inhibitor (ASI) targeted to an allele of a first essential gene
CC   present in cells of the precancerous condition, where the normal somatic
CC   cells of the patient are heterozygous for the first gene, the inhibitor
CC   is active on at least one but less than all allelic forms of the gene
CC   present in a population and targets only one allelic form present in the
CC   normal somatic cells, and the first gene. The products and methods can be
CC   used in the diagnosis, prevention and treatment of LOH disorders, e.g.
CC   cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
CC   lesions, benign tumours, endometriosis, polycystic kidney disease, and
CC   graft versus host disease. The method can also be used to remove
CC   malignant cells from bone marrow transplants. AAZ25812-Z26825 represent
CC   human polymorphic sites described in the method of the invention
XX
SQ   Sequence 21 BP; 2 A; 12 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        940 GGCCTGGCCTACTGCCACC 958
              | |||||||| | ||||||
Db          3 GCCCTGGCCTTCCGCCACC 21


RESULT 1172
AAZ26242/c
ID   AAZ26242 standard; DNA; 21 BP.
XX
AC   AAZ26242;
XX
DT   30-NOV-1999  (first entry)
XX
DE   Human polymorphic region 431.
XX
KW   Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
KW   cell viability; loss of heterozygosity; precancerous condition; ASI;
KW   allele specific inhibitor; somatic cell; diagnosis; prevention;
KW   atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
KW   dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
KW   graft versus host disease; malignant cell removal; bone marrow; ss.
XX
OS   Homo sapiens.
XX
PN   WO9841648-A2.
XX
PD   24-SEP-1998.
XX
PF   19-MAR-1998;   98WO-US005419.
XX
PR   20-MAR-1997;   97US-0041057P.
XX
PA   (VARI-) VARIAGENICS INC.
XX
PI   Housman D,  Ledley FD,  Stanton VP;
XX
DR   WPI; 1998-521232/44.
XX
PT   Identifying target genes for allele-specific drugs - used for diagnosis,
PT   prevention and treatment of, e.g. cancers, atherosclerotic plaque,
PT   dysplastic lesions, endometriosis or graft versus host disease.
XX
PS   Disclosure; Fig 7; 605pp; English.
XX
CC   This invention describes a novel method for identifying an inhibitor
CC   potentially useful for treatment of cancer, where the inhibitor is active
CC   on a gene vital for cell growth or viability, and where the gene is
CC   subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
CC   used for preventing the development of cancer in a patient having a
CC   precancerous condition, by administering to the patient a first allele
CC   specific inhibitor (ASI) targeted to an allele of a first essential gene
CC   present in cells of the precancerous condition, where the normal somatic
CC   cells of the patient are heterozygous for the first gene, the inhibitor
CC   is active on at least one but less than all allelic forms of the gene
CC   present in a population and targets only one allelic form present in the
CC   normal somatic cells, and the first gene. The products and methods can be
CC   used in the diagnosis, prevention and treatment of LOH disorders, e.g.
CC   cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
CC   lesions, benign tumours, endometriosis, polycystic kidney disease, and
CC   graft versus host disease. The method can also be used to remove
CC   malignant cells from bone marrow transplants. AAZ25812-Z26825 represent
CC   human polymorphic sites described in the method of the invention
XX
SQ   Sequence 21 BP; 4 A; 9 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;
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```
Qy        235 GGTGGTGGCGGCAGTGACC 253
              ||||||||||||| | | |
Db         20 GGTGGTGGCGGCACTCAGC 2
```

RESULT 1173
AAZ26102
ID AAZ26102 standard; DNA; 21 BP.
XX
AC AAZ26102;
XX
DT 30-NOV-1999 (first entry)
XX
DE Human polymorphic region 291.
XX
KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
KW cell viability; loss of heterozygosity; precancerous condition; ASI;
KW allele specific inhibitor; somatic cell; diagnosis; prevention;
KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
KW graft versus host disease; malignant cell removal; bone marrow; ss.
XX
OS Homo sapiens.
XX
PN WO9841648-A2.
XX
PD 24-SEP-1998.
XX
PF 19-MAR-1998; 98WO-US005419.
XX
PR 20-MAR-1997; 97US-0041057P.
XX
PA (VARI-) VARIAGENICS INC.
XX
PI Housman D, Ledley FD, Stanton VP;
XX
DR WPI; 1998-521232/44.
XX
PT Identifying target genes for allele-specific drugs - used for diagnosis,
PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
PT dysplastic lesions, endometriosis or graft versus host disease.
XX
PS Disclosure; Fig 7; 605pp; English.
XX
CC This invention describes a novel method for identifying an inhibitor
CC potentially useful for treatment of cancer, where the inhibitor is active
CC on a gene vital for cell growth or viability, and where the gene is
CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
CC used for preventing the development of cancer in a patient having a
CC precancerous condition, by administering to the patient a first allele
CC specific inhibitor (ASI) targeted to an allele of a first essential gene
CC present in cells of the precancerous condition, where the normal somatic
CC cells of the patient are heterozygous for the first gene, the inhibitor
CC is active on at least one but less than all allelic forms of the gene
CC present in a population and targets only one allelic form present in the
CC normal somatic cells, and the first gene. The products and methods can be
CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
CC lesions, benign tumours, endometriosis, polycystic kidney disease, and
CC graft versus host disease. The method can also be used to remove
CC malignant cells from bone marrow transplants. AAZ25812-Z26825 represent
CC human polymorphic sites described in the method of the invention
XX
SQ Sequence 21 BP; 1 A; 5 C; 10 G; 5 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        217 GGCCTGGATGAGAGTGGTG 235
              ||||||  || ||||||||
Db          2 GGCCTGCCTGTGAGTGGTG 20
```

RESULT 1174
AAX17882/c
ID AAX17882 standard; DNA; 21 BP.
XX
AC AAX17882;
XX
DT 11-MAY-1999 (first entry)
XX
DE Anti-CMV oligonucleotide #2922.
XX
KW Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
KW cytomegalovirus; inhibition; replication; sugar modification;
KW phosphorothioate; infection; retinitis; ss.
XX
OS Synthetic.
OS Human herpesvirus 5.
XX
FH Key Location/Qualifiers
FT modified_base 1. .21
FT /*tag= a
FT /note= "contains phosphorothioate internucleotide
FT linkages"
XX
PN WO9845314-A1.
XX
PD 15-OCT-1998.
XX
PF 07-APR-1998; 98WO-US006895.
XX
PR 09-APR-1997; 97US-00838715.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Draper KG, Kisner DL, Anderson KP, Chapman S;
XX
DR WPI; 1998-568330/48.
XX
PT New antisense oligonucleotides that target cytomegalovirus nucleic acid -
PT particularly including 2-methoxyethoxy sugar modifications, especially
PT for treating viral retinitis, with long-lasting retention in the retina.
XX
PS Claim 2; Page 24; 99pp; English.
XX
CC Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic
CC acid (AAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
CC replication. Optionally the oligonucleotides include at least one 2'-(2-
CC methoxyethoxy) sugar modification or phosphorothioate internucleotide
CC linkages. The oligonucleotides are used to inhibit CMV infections (by in
CC vivo or in vitro contact with cells, tissues or body fluids), especially
CC to treat or prevent CMV infections, particularly retinitis
XX
SQ Sequence 21 BP; 0 A; 7 C; 4 G; 10 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        131 GGATGAAGAAGATCAAACG 149
              | | |||||||| ||||||
Db         20 GCAAGAAGAAGAGCAAACG 2
```

RESULT 1175
AAA07030
ID AAA07030 standard; DNA; 21 BP.
XX
AC AAA07030;
XX
DT 03-JUL-2000 (first entry)
XX
DE Human integrin beta 3 quantitative real-time PCR primer, SEQ ID NO:3.

```
XX
KW   Integrin beta 3; human endothelial glycoprotein; GP3A; GPIIIa; ITGB3;
KW   CD61; platelet glycoprotein 3a; cellular adhesion; vitronectin receptor;
KW   fibronectin receptor; expression inhibition; antisense therapy;
KW   tumour formation; cancer invasion; bleeding disorder; inflammation;
KW   quantitative real-time PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   US6037176-A.
XX
PD   14-MAR-2000.
XX
PF   25-JUN-1999;   99US-00344520.
XX
PR   25-JUN-1999;   99US-00344520.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Cowsert LM,  Monia BP;
XX
DR   WPI; 2000-246189/21.
XX
PT   New antisense compound that inhibits human integrin beta3, useful e.g.
PT   for treating or preventing infection, inflammation and tumors.
XX
PS   Example 13; Col 39; 33pp; English.
XX
CC   Sequences AAA07029-A07030 represent human integrin beta 3 PCR primers
CC   used in quantitative real-time PCR with probe AAA07031 in an
CC   exemplification of the present invention. The invention relates to
CC   antisense oligonucleotides targetted to the human integrin beta 3 gene,
CC   which inhibit its expression. A series of oligonucleotides (AAA07035-
CC   AAA07074) were designed to target different regions of the human integrin
CC   beta 3 RNA, and were analysed for their effect on integrin beta 3 mRNA
CC   levels by quantitative real-time PCR. GAPDH (glyceraldehyde-3-phosphate)
CC   mRNA levels were measured as a control. Integrins constitute one of four
CC   classes of cellular adhesion molecules, and play an important role in
CC   cell migration, cell anchorage to substrates and cytoadhesion signalling
CC   pathways. They are heterodimeric cation-dependent membrane glycoproteins
CC   composed of an alpha and beta subunit. Integrin beta 3 (also known as
CC   human endothelial glycoprotein, GP3A, GPIIIa, ITGB3, CD61 and platelet
CC   glycoprotein 3a) is the common beta subunit partner of the members of the
CC   beta-3 subfamily of integrins. This family consists of the vitronectin
CC   receptor (alpha-V-beta-3) and the fibronectin receptor (alpha-IIb-beta-
CC   3). Cells expressing this class of integrin can adhere to various matrix
CC   proteins and participate in various cytoadhesion-driven cellular
CC   responses. Integrin beta 3 is implicated in conditions such as vascular
CC   restenosis, excessive bone resorption, angiogenesis (in melanoma), tumour
CC   invasion, platelet aggregation and Glanzmann's thrombasthenia. The
CC   oligonucleotides of the invention are useful for diagnosis, prevention
CC   and treatment of conditions associated with integrin beta 3 expression,
CC   such as tumour formation, inflammation, infections and the diseases
CC   mentioned above
XX
SQ   Sequence 21 BP; 5 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        614 CCTACATTAAGCTGGACAA 632
              ||  ||||| |||||||||
Db          1 CCGTCATTAGGCTGGACAA 19


RESULT 1176
AAZ59350/c
ID   AAZ59350 standard; DNA; 21 BP.
XX
AC   AAZ59350;
XX
DT   05-APR-2000  (first entry)
XX
DE   Human STP2 gene promoter polymorphism sequence 108.
XX
KW   Single nucleotide polymorphism; SNP; STP2; phenol sulphotransferase;
KW   probe; genotyping; human; drug metabolism; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   variation       11
FT                   /*tag=  a
FT                   /note= "Site of polymorphism"
XX
PN   WO9964630-A1.
XX
PD   16-DEC-1999.
XX
PF   09-JUN-1999;   99WO-US013094.
XX
PR   10-JUN-1998;   98US-0088710P.
XX
PA   (AXYS-) AXYS PHARM INC.
XX
PI   Guida M,  Kurth J;
XX
DR   WPI; 2000-105892/09.
XX
PT   Novel nucleic acid used for genotyping, e.g. to predict rate of drug
PT   metabolism.
XX
PS   Claim 2; Page 17; 46pp; English.
XX
CC   Sequences AAZ59305-Z59352 are fragments of the human STP2 gene. The
CC   fragments are from the 8 exons, the promoter region, 3' and 5'
CC   untranslated regions of the STP2 gene. Each sequence contains a newly
CC   identified STP2 gene single nucleotide polymorphism (SNP). STP2 is a
CC   phenol sulphotransferase. Substrates for STP2 include minoxidil,
CC   acetaminophen, and paranitrophenol. Several of the nucleotide changes
CC   identified at the polymorphism sites, give rise to an amino acid change.
CC   Amino acid changes may result in altered enzyme activity. The sequences
CC   can be used as probes for detecting STP2 polymorphisms. The polymorphic
CC   probes are used in screening and genotyping, i.e. to predict the rate of
CC   metabolism of STP2 substrates, potential drug-drug interactions and
CC   adverse side effects. They can also be used to detect diseases resulting
CC   from accidental or occupational exposure to toxins and to establish
CC   animal, cell or in vitro models for drug metabolism
XX
SQ   Sequence 21 BP; 2 A; 9 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         26 GAATGCAGAGGTAGGCAGG 44
              ||| || ||| ||||||||
Db         19 GAAAGCTGAGATAGGCAGG 1


RESULT 1177
AAZ73744/c
ID   AAZ73744 standard; DNA; 21 BP.
XX
AC   AAZ73744;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Human biallelic marker downstream amplification primer SEQ ID NO:8100.
XX
KW   Human genome; biallelic marker; high density disequilibrium map;
KW   genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW   haplotyping; hybridisation; identification; characterisation;
KW   amplification; single nucleotide polymorphism; SNP; PCR primer;
KW   diagnosis; ss.
```

```
XX
OS   Homo sapiens.
XX
PN   WO9954500-A2.
XX
PD   28-OCT-1999.
XX
PF   21-APR-1999;   99WO-IB000822.
XX
PR   21-APR-1998;   98US-0082614P.
PR   23-NOV-1998;   98US-0109732P.
XX
PA   (GEST ) GENSET.
XX
PI   Cohen D,  Blumenfeld M,  Chumakov I;
XX
DR   WPI; 2000-013267/01.
XX
PT   Novel biallelic markers used to construct a high density disequilibrium
PT   map of the human genome.
XX
PS   Claim 8; Page 1957; 2745pp; English.
XX
CC   AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC   invention, which contain a polymorphic base at position 24 of their
CC   nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC   primers for the biallelic markers. The biallelic markers of the invention
CC   have a variety of uses: they can be used for high density mapping of the
CC   human genome, and in complex association studies and haplotyping studies
CC   which are useful in determining the genetic basis for disease states.
CC   Compositions and methods of the invention can also be useful for the
CC   identification of the targets for the development of pharmaceutical
CC   agents and diagnostic methods, as well as the characterisation of the
CC   differential efficacious responses to and side effects from
CC   pharmaceutical agents acting on a disease as well as other treatment.
CC   N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC   3367, are not actually given a sequence in the Sequence Listing from the
CC   present invention
XX
SQ   Sequence 21 BP; 7 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        392 CGGATGAGGTGCAGTCTCC 410
              | |||||  ||||||||||
Db         21 CAGATGATTTGCAGTCTCC 3


RESULT 1178
AAZ56234
ID   AAZ56234 standard; DNA; 21 BP.
XX
AC   AAZ56234;
XX
DT   15-MAR-2000  (first entry)
XX
DE   Mutated Influenza virus NA gene sequence primer SEQ ID NO:1.
XX
KW   Recombinant negative strand viral RNA template; virus particle;
KW   RNA directed RNA polymerase complex; expression; chimeric virus; vaccine;
KW   packaging; ss.
XX
OS   Influenza virus.
OS   Synthetic.
XX
PN   US6001634-A.
XX
PD   14-DEC-1999.
XX
PF   29-JUN-1998;   98US-00106377.
XX
PR   28-AUG-1989;   89US-00399728.
PR   21-NOV-1989;   89US-00440053.
PR   22-MAY-1990;   90US-00527237.
PR   04-AUG-1992;   92US-00925061.
PR   01-FEB-1994;   94US-00190698.
PR   01-JUN-1994;   94US-00252508.
XX
PA   (PALE/) PALESE P.
PA   (GARC/) GARCIA-SASTRE A.
XX
PI   Palese P,  Garcia-Sastre A;
XX
DR   WPI; 2000-071660/06.
XX
PT   Chimeric virus containing influenza virus RNA segments, useful for
PT   expressing heterologous gene products in appropriate host cell systems.
XX
PS   Example; Col 55; 67pp; English.
XX
CC   The present invention describes a chimeric virus comprising influenza
CC   virus containing a heterologous RNA segment from another strain of
CC   influenza virus or 8 genomic segments from different strains of influenza
CC   virus, with each segment comprising the reverse complement of a mRNA
CC   coding sequence operatively linked to a binding site specific for an RNA-
CC   directed RNA polymerase of a negative strand RNA virus. The recombinant
CC   negative strand virus RNA templates may be used to express heterologous
CC   gene products in appropriate host cell systems and/or to construct
CC   recombinant viruses that express, package and/or present the heterologous
CC   gene product. The expression products and chimeric viruses may be used in
CC   vaccine formulations. AAY57746 to AAY57748, and AAZ56234 to AAZ56290,
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 21 BP; 6 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        908 ACGTGAAACTGTTCCTGTT 926
              ||| | || ||||||||||
Db          2 ACGAGGAAATGTTCCTGTT 20


RESULT 1179
AAF97537/c
ID   AAF97537 standard; DNA; 21 BP.
XX
AC   AAF97537;
XX
DT   06-JUN-2001  (first entry)
XX
DE   Human gene single nucleotide polymorphism #2298.
XX
KW   Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW   polymorphism; vascular disease; coronary artery disease; forensics;
KW   myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW   pulmonary embolism; paternity test; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Variation       replace(11,G)
FT                   /*tag=  a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200118250-A2.
XX
PD   15-MAR-2001.
XX
PF   07-SEP-2000; 2000WO-US024503.
XX
PR   10-SEP-1999;   99US-0153357P.
PR   26-JUL-2000; 2000US-0220947P.
```

```
PR   16-AUG-2000; 2000US-0225724P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Lander ES,  Gargill M,  Ireland JS,  Bolk S,  Daley GQ,  Mccarthy JJ;
XX
DR   WPI; 2001-226749/23.
XX
PT   Nucleic acids comprising single nucleotide polymorphisms, useful in
PT   applications such as forensics, paternity testing, medicine, genetic
PT   analysis and phenotype correlations to diseases such as diabetes and
PT   atherosclerosis.
XX
PS   Example; Page 204; 242pp; English.
XX
CC   The present invention provides a method of diagnosing a vascular disease
CC   in an individual, involving determining the sequence at various
CC   polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC   genes. The sequences at a number of polymorphic sites are also provided
CC   in the specification. In particular, the method can be used in the
CC   diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC   disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC   pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC   useful in forensics, paternity testing, genetic analysis and phenotype
CC   correlations to diseases. The present sequence is an example of one of
CC   the human gene SNPS shown in the specification
XX
SQ   Sequence 21 BP; 3 A; 6 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        490 GACATCCGGCTGCCTGAGG 508
              | | ||| ||||||||||
Db         21 GCCCTCCCGCTGCCTGAGG 3


RESULT 1180
AAF95312
ID   AAF95312 standard; DNA; 21 BP.
XX
AC   AAF95312;
XX
DT   06-JUN-2001  (first entry)
XX
DE   Human gene single nucleotide polymorphism #73.
XX
KW   Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW   polymorphism; vascular disease; coronary artery disease; forensics;
KW   myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW   pulmonary embolism; paternity test; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Variation       replace(11,C)
FT                   /*tag=  a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200118250-A2.
XX
PD   15-MAR-2001.
XX
PF   07-SEP-2000; 2000WO-US024503.
XX
PR   10-SEP-1999;   99US-0153357P.
PR   26-JUL-2000; 2000US-0220947P.
PR   16-AUG-2000; 2000US-0225724P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Lander ES,  Gargill M,  Ireland JS,  Bolk S,  Daley GQ,  Mccarthy JJ;
XX
DR   WPI; 2001-226749/23.
XX
PT   Nucleic acids comprising single nucleotide polymorphisms, useful in
PT   applications such as forensics, paternity testing, medicine, genetic
PT   analysis and phenotype correlations to diseases such as diabetes and
PT   atherosclerosis.
XX
PS   Example; Page 51; 242pp; English.
XX
CC   The present invention provides a method of diagnosing a vascular disease
CC   in an individual, involving determining the sequence at various
CC   polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC   genes. The sequences at a number of polymorphic sites are also provided
CC   in the specification. In particular, the method can be used in the
CC   diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC   disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC   pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC   useful in forensics, paternity testing, genetic analysis and phenotype
CC   correlations to diseases. The present sequence is an example of one of
CC   the human gene SNPS shown in the specification
XX
SQ   Sequence 21 BP; 9 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        719 AACATGAAGAGGGGGCACC 737
              ||||| |||||| | ||||
Db          1 AACATTAAGAGGTGCCACC 19


RESULT 1181
AAF96385
ID   AAF96385 standard; DNA; 21 BP.
XX
AC   AAF96385;
XX
DT   06-JUN-2001  (first entry)
XX
DE   Human gene single nucleotide polymorphism #1146.
XX
KW   Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW   polymorphism; vascular disease; coronary artery disease; forensics;
KW   myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW   pulmonary embolism; paternity test; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Variation       replace(11,A)
FT                   /*tag=  a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200118250-A2.
XX
PD   15-MAR-2001.
XX
PF   07-SEP-2000; 2000WO-US024503.
XX
PR   10-SEP-1999;   99US-0153357P.
PR   26-JUL-2000; 2000US-0220947P.
PR   16-AUG-2000; 2000US-0225724P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Lander ES,  Gargill M,  Ireland JS,  Bolk S,  Daley GQ,  Mccarthy JJ;
XX
DR   WPI; 2001-226749/23.
```

```
XX
PT   Nucleic acids comprising single nucleotide polymorphisms, useful in
PT   applications such as forensics, paternity testing, medicine, genetic
PT   analysis and phenotype correlations to diseases such as diabetes and
PT   atherosclerosis.
XX
PS   Example; Page 130; 242pp; English.
XX
CC   The present invention provides a method of diagnosing a vascular disease
CC   in an individual, involving determining the sequence at various
CC   polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC   genes. The sequences at a number of polymorphic sites are also provided
CC   in the specification. In particular, the method can be used in the
CC   diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC   disease, stroke, peripheral vascular diseases, venous thromboembolism and
CC   pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC   useful in forensics, paternity testing, genetic analysis and phenotype
CC   correlations to diseases. The present sequence is an example of one of
CC   the human gene SNPS shown in the specification
XX
SQ   Sequence 21 BP; 5 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1167 GGGCTGCATCTTCTATGAG 1185
              ||||  || ||||||||||
Db          1 GGGCATCAGCTTCTATGAG 19


RESULT 1182
AAH62348
ID   AAH62348 standard; DNA; 21 BP.
XX
AC   AAH62348;
XX
DT   09-SEP-2004  (revised)
DT   12-SEP-2001  (first entry)
XX
DE   ATF3 polymorphism containing DNA fragment #249.
XX
KW   Single nucleotide polymorphism; SNP; human; cancer; inflammation;
KW   heart disease; paternity testing; forensic science; ds.
XX
OS   Homo sapiens.
OS   Unidentified.
XX
FH   Key             Location/Qualifiers
FT   variation       11
FT                   /*tag=  a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200138576-A2.
XX
PD   31-MAY-2001.
XX
PF   17-NOV-2000; 2000WO-US031639.
XX
PR   24-NOV-1999;   99US-0167334P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   Cargill M,  Ireland JS,  Lander ES;
XX
DR   WPI; 2001-367705/38.
XX
PT   New nucleic acid segments of the human genome, particularly from genes
PT   including polymorphic sites,for phenotype correlation, forensics,
PT   paternity testing, medicine and genetic analysis.
XX
PS   Claim 1; Page 49; 80pp; English.
XX
CC   DNA sequences AAH62100 - AAH62688 represent segments of human genes which
CC   contain single nucleotide polymorphisms (SNPs). A method is included in
CC   the invention for analysing a nucleic acid sample, which consists of
CC   determining the base occupying any one of the polymorphic sites given in
CC   the SNP containing sequences. The nucleotide sequences can be used in the
CC   diagnosis or monitoring of diseases, such as cancer, inflammation, heart
CC   diseases, diseases of the cardiovascular system, and infection by
CC   microorganisms. The oligonucleotides are also useful in the manufacture
CC   of a medicament for the treatment or prophylaxis of the diseases, and as
CC   a pharmaceutical. SNP containing oligonucleotides are useful in
CC   applications such as phenotype correlation, forensics, paternity testing,
CC   medicine and genetic analysis
CC
CC   Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
XX
SQ   Sequence 21 BP; 3 A; 4 C; 11 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         39 GGCAGGAGGACCAGCAGTG 57
              ||| ||||| || ||||||
Db          1 GGCGGGAGGGCCTGCAGTG 19


RESULT 1183
AAH62637
ID   AAH62637 standard; DNA; 21 BP.
XX
AC   AAH62637;
XX
DT   09-SEP-2004  (revised)
DT   12-SEP-2001  (first entry)
XX
DE   Opiate receptor like 1 polymorphism containing DNA fragment #538.
XX
KW   Single nucleotide polymorphism; SNP; human; cancer; inflammation;
KW   heart disease; paternity testing; forensic science; ds.
XX
OS   Homo sapiens.
OS   Unidentified.
XX
FH   Key             Location/Qualifiers
FT   variation       11
FT                   /*tag=  a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200138576-A2.
XX
PD   31-MAY-2001.
XX
PF   17-NOV-2000; 2000WO-US031639.
XX
PR   24-NOV-1999;   99US-0167334P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   Cargill M,  Ireland JS,  Lander ES;
XX
DR   WPI; 2001-367705/38.
XX
PT   New nucleic acid segments of the human genome, particularly from genes
PT   including polymorphic sites,for phenotype correlation, forensics,
PT   paternity testing, medicine and genetic analysis.
XX
PS   Claim 1; Page 72; 80pp; English.
XX
CC   DNA sequences AAH62100 - AAH62688 represent segments of human genes which
CC   contain single nucleotide polymorphisms (SNPs). A method is included in
CC   the invention for analysing a nucleic acid sample, which consists of
CC   determining the base occupying any one of the polymorphic sites given in
CC   the SNP containing sequences. The nucleotide sequences can be used in the
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CC   diagnosis or monitoring of diseases, such as cancer, inflammation, heart
CC   diseases, diseases of the cardiovascular system, and infection by
CC   microorganisms. The oligonucleotides are also useful in the manufacture
CC   of a medicament for the treatment or prophylaxis of the diseases, and as
CC   a pharmaceutical. SNP containing oligonucleotides are useful in
CC   applications such as phenotype correlation, forensics, paternity testing,
CC   medicine and genetic analysis
CC
CC   Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
XX
SQ   Sequence 21 BP; 3 A; 6 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        923 TGTTCCAGCTGCTCCGTGG 941
              || ||| || |||||||||
Db          2 TGATCCGGCGGCTCCGTGG 20


RESULT 1184
AAF75649
ID   AAF75649 standard; DNA; 21 BP.
XX
AC   AAF75649;
XX
DT   10-MAY-2001  (first entry)
XX
DE   Murine ztrypl coding sequence PCR primer ZC18,365.
XX
KW   Mouse; ztrypl; serine protease; tryptase; inflammation; fertilisation;
KW   cardiovascular disease; infertility; asthma; immune disorder; stroke;
KW   gastrointestinal disorder; testicular function; contraceptive;
KW   PCR primer; ss.
XX
OS   Mus musculus.
XX
PN   WO200112788-A2.
XX
PD   22-FEB-2001.
XX
PF   09-AUG-2000; 2000WO-US022156.
XX
PR   18-AUG-1999;   99US-00376445.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Presnell SR,  Taft DW;
XX
DR   WPI; 2001-202859/20.
XX
PT   New mouse serine protease polypeptides ztrypl and polynucleotides, useful
PT   for treating cardiovascular disease, infertility, impotence and other
PT   male reproductive dysfunction.
XX
PS   Example 1; Page 102; 112pp; English.
XX
CC   The present invention provides the protein and coding sequences of the
CC   human and murine serine protease ztrypl. This is a tryptase like protein
CC   which is highly expressed in contractile tissues. The sequences can be
CC   used in the treatment and identification of treatments for cardiovascular
CC   disease, inflammation, infertility, male reproductive dysfunction,
CC   asthma, stroke, immune disorders and gastrointestinal disorders. In
CC   addition, they can be used to modulate testicular function and as
CC   contraceptives
XX
SQ   Sequence 21 BP; 1 A; 9 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1195 GGCCGTCCCCTCTTTCCGG 1213
              ||| |||||||| |||| |
Db          2 GGCTGTCCCCTCCTTCCTG 20


RESULT 1185
AAF90246/c
ID   AAF90246 standard; DNA; 21 BP.
XX
AC   AAF90246;
XX
DT   06-AUG-2001  (first entry)
XX
DE   PCR primer for UDP-glucose:aglycon-glucosyltransferase DNA probe.
XX
KW   UDP-glucose:aglycon-glucosyltransferase; UDP-GAG; cyanohydrin; terpenoid;
KW   glucose; transgenic plant; cyanogenic glucoside biosynthesis;
KW   pathogen resistance; herbivore response; PCR primer; ss.
XX
OS   Sorghum bicolor.
XX
PN   WO200140491-A2.
XX
PD   07-JUN-2001.
XX
PF   29-NOV-2000; 2000WO-EP011982.
XX
PR   01-DEC-1999;   99EP-00123838.
XX
PA   (LUMI-) LUMINIS PTY LTD.
PA   (UYRO-) UNIV ROYAL VETERINARY & AGRIC.
XX
PI   Hoej P,  Moeller BL,  Jones PR;
XX
DR   WPI; 2001-374846/39.
XX
PT   DNA molecule coding for UDP-glucose:aglycon-glucosyltransferase
PT   conjugating cyanohydrin, terpenoid or phenylderivative to glucose, for
PT   producing transgenic plants having modified cyanogenic glucoside
PT   biosynthesis.
XX
PS   Example 4; Page 17; 31pp; English.
XX
CC   PCR primers AAF90246-47 were used to amplify a DNA probe for DNA encoding
CC   a UDP-glucose:aglycon-glucosyltransferase (UDP-GAG) polypeptide. The
CC   enzyme conjugates a cyanohydrin, terpenoid, phenylderivative or
CC   hexanolderivative to glucose. UDP-GAG polynucleotides are useful for
CC   producing transgenic plants having modified cyanogenic glucoside
CC   biosynthesis. Constitutive, inducible or tissue-specific expression of
CC   UDP-GAG is useful for obtaining transgenic cyanogenic plants with altered
CC   resistance to pathogens and herbivore responses
XX
SQ   Sequence 21 BP; 3 A; 5 C; 13 G; 0 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        552 GCCCCTCAGCCGCCGCCTC 570
              ||||| | |||| ||||||
Db         19 GCCCCGCCGCCGTCGCCTC 1


RESULT 1186
AAF87687/c
ID   AAF87687 standard; DNA; 21 BP.
XX
AC   AAF87687;
XX
DT   16-JUL-2001  (first entry)
XX
DE   Human RecQ5 type DNA helicase sequencing primer 501.
XX
```

```
KW   Human; RecQ5 alpha; RecQ5 beta; RecQ5 gamma; DNA helicase;
KW   alternative splicing; chromosomal instability; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200125425-A1.
XX
PD   12-APR-2001.
XX
PF   25-AUG-2000; 2000WO-JP005757.
XX
PR   05-OCT-1999;   99JP-00284001.
XX
PA   (AGEN-) AGENE RES INST CO LTD.
XX
PI   Furuichi Y,  Shimamoto A,  Kitao S,  Nishikawa K;
XX
DR   WPI; 2001-273577/28.
XX
PT   Polynucleotide encoding for RecQ5beta helicase useful for diagnosis and
PT   treatment of chromosomal instability.
XX
PS   Example 2; Page 32; 97pp; Japanese.
XX
CC   The present sequence is a primer used to sequence a polynucleotide
CC   encoding a human RecQ5 type DNA helicase. The three RecQ5 type helicases
CC   alpha, beta and gamma are formed by alternative splicing. The invention
CC   discloses the RecQ5 type DNA helicases beta and gamma, and the genes
CC   encoding them. The RecQ5 beta DNA helicase has a novel characteristic of
CC   being localised in the nucleus. It is useful as a diagnostic marker or in
CC   the treatment of diseases associated with chromosomal instability
XX
SQ   Sequence 21 BP; 6 A; 2 C; 9 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        823 AAGTCCCTCACCCTTGTCT 841
              |||| |||||||| | |||
Db         20 AAGTGCCTCACCCCTTTCT 2


RESULT 1187
AAC86918/c
ID   AAC86918 standard; RNA; 21 BP.
XX
AC   AAC86918;
XX
DT   02-APR-2001  (first entry)
XX
DE   Critical sequence of a ribozyme targeting the oestrogen receptor.
XX
KW   Ribozyme; oestrogen-dependent tumour; cell proliferation; glucocorticoid;
KW   DNA-binding domain; oestrogen receptor; cancer treatment; breast cancer;
KW   ss.
XX
OS   Synthetic.
XX
PN   WO200074485-A1.
XX
PD   14-DEC-2000.
XX
PF   02-JUN-2000; 2000WO-US015243.
XX
PR   04-JUN-1999;   99US-0137470P.
XX
PA   (TEXA ) UNIV TEXAS.
XX
PI   Roy AK,  Lavrovsky Y,  Tyagi RK,  Song CS,  Chatterjee B;
XX
DR   WPI; 2001-061633/07.
XX
PT   Ribozyme having a high substrate specificity for an mRNA encoding a DNA-
PT   binding domain of human estrogen receptor, useful for inhibiting estrogen
PT   -dependent tumor cell proliferation, particularly breast cancer.
XX
PS   Claim 4; Page 6; 49pp; English.
XX
CC   The specification describes a ribozyme capable of inhibiting oestrogen-
CC   dependent tumour cell proliferation and having a high substrate
CC   specificity for an mRNA sequence encoding a DNA-binding domain of human
CC   oestrogen receptor. The ribozyme is free of endonuclease activity for an
CC   mRNA having a DNA binding domain of a glucocorticoid. The oestrogen
CC   receptor site-specific ribozymes are useful for cancer treatment and
CC   therapies, especially for inhibiting oestrogen-dependent tumour cell
CC   proliferation, particularly breast cancer. The present sequenc represents
CC   the critical sequence of a ribozyme of the invention, which targets the
CC   the DNA binding domain of a human oestrogen receptor
XX
SQ   Sequence 21 BP; 7 A; 3 C; 8 G; 0 T; 3 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1571 ACTCAGGCAGGCCAGCTTT 1589
              |||||||||  || |||||
Db         19 ACTCAGGCACTCCTGCTTT 1


RESULT 1188
AAD09996/c
ID   AAD09996 standard; DNA; 21 BP.
XX
AC   AAD09996;
XX
DT   12-SEP-2001  (first entry)
XX
DE   Mus musculus goosecoid exon 2 DNA amplifying exon 2 forward PCR primer.
XX
KW   Mouse; fertility; reproduction; gametogenesis; microinjection; infection;
KW   goosecoid gene; PCR primer; embryogenesis; ss.
XX
OS   Mus musculus.
XX
PN   WO200148224-A1.
XX
PD   05-JUL-2001.
XX
PF   22-DEC-2000; 2000WO-AU001596.
XX
PR   24-DEC-1999;   99AU-00004884.
XX
PA   (CSIR ) COMMONWEALTH SCI & IND RES ORG.
XX
PI   Thresher R,  Hinds L,  Hardy C,  Whyard S,  Vignarajan S,  Grewe PM;
PI   Patil J;
XX
DR   WPI; 2001-425672/45.
XX
PT   Novel construct for preventing embryogenesis in animals comprises native
PT   promoter, blocking DNA which abrogates function of crucial gene and
PT   genetic switch to regulate expression/repression of blocker/gene
PT   knockout.
XX
PS   Example 13; Page 104; 241pp; English.
XX
CC   The invention relates to a construct which allows animals to be bred in
CC   captivity but renders them infertile in the wild by allowing reversible
CC   control over fertility and reproduction. The construct comprises a native
CC   promoter, a blocking DNA sequence contoured for and designed to abrogate
CC   a crucial gene's function or to cause its mis-expression, and a genetic
CC   switch to regulate controlled expression/repression of the blocker/gene
CC   knockout. The construct is useful for preventing embryogenesis or
CC   gametogenesis in animals by stably transforming an animal cell with the
```

```
CC   construct by microinjection, transfection or infection, where the
CC   construct stably integrates into the genome by homologous recombination,
CC   and implanting the cell into a host organism, where a whole animal
CC   develops from the implanted cell. The present sequence is a PCR primer
CC   used for amplifying mouse goosecoid exon 2 DNA
XX
SQ   Sequence 21 BP; 2 A; 7 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1328 AGTACCGAGCCGAGGCCCT 1346
              ||||| || ||| ||||||
Db         21 AGTACAGAACCGGGGCCCT 3


RESULT 1189
ABK65778
ID   ABK65778 standard; DNA; 21 BP.
XX
AC   ABK65778;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human single nucleotide polymorphism #398.
XX
KW   Human; single nucleotide polymorphism; SNP; sickle cell anaemia;
KW   agammaglobulinaemia; diabetes insipidus; Lesch-Nyhan syndrome;
KW   muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease;
KW   familial hypercholesterolaemia; polycystic kidney disease; cancer;
KW   hereditary spherocytosis; Von Willebrand's disease; tuberous sclerosis;
KW   hereditary haemorrhagic telangiectasia; familial colonic polyposis;
KW   Ehlers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease;
KW   acute intermittent porphyria; inflammation; nervous system disorder;
KW   infection; rheumatoid arthritis; multiple sclerosis; diabetes;
KW   systemic lupus erythematosus; Graves disease; longevity; obesity;
KW   baldness; fertility; forensic; paternity testing; ss.
XX
OS   Homo sapiens.
XX
PN   US2002037508-A1.
XX
PD   28-MAR-2002.
XX
PF   18-JAN-2001; 2001US-00765081.
XX
PR   19-JAN-2000; 2000US-0176861P.
XX
PA   (CARG/) CARGILL M.
PA   (IREL/) IRELAND J S.
PA   (LAND/) LANDER E S.
XX
PI   Cargill M,  Ireland JS,  Lander ES;
XX
DR   WPI; 2002-315108/35.
XX
PT   Nucleic acid comprising single nucleotide polymorphisms, useful in
PT   forensics, paternity testing and diagnosis of disease.
XX
PS   Claim 1; Page 86; 96pp; English.
XX
CC   The invention relates to a nucleic acid comprising single nucleotide
CC   polymorphisms (SNPs) associated with diseases. The nucleic acids
CC   comprising the SNPs and probes and primers for detecting them may be used
CC   in assays for the diagnosis of diseases associated with SNPs (such as
CC   sickle cell anaemia, agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan
CC   syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease,
CC   familial hypercholesterolaemia, polycystic kidney disease, hereditary
CC   spherocytosis, Von Willebrand's disease, tuberous sclerosis, hereditary
CC   haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
CC   syndrome, osteogenesis imperfecta, and acute intermittent porphyria,
CC   symptoms of, or susceptibility to, multifactorial diseases of which a
CC   component is or may be genetic, such as autoimmune diseases,
CC   inflammation, cancer, diseases of the nervous system, and infection by
CC   pathogenic microorganisms, autoimmune diseases including rheumatoid
CC   arthritis, multiple sclerosis, diabetes (insulin-dependent and non-
CC   independent), systemic lupus erythematosus and Graves disease, cancers
CC   including cancers of the bladder, brain, breast, colon, oesophagus,
CC   kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,
CC   skin, stomach and uterus, longevity, appearance (e.g., baldness,
CC   obesity), strength, speed, endurance, fertility, and susceptibility or
CC   receptivity to particular drugs or therapeutic treatments), in forensics
CC   and in paternity testing. ABK65381-ABK65841 represent human single
CC   nucleotide polymorphisms of the invention
XX
SQ   Sequence 21 BP; 4 A; 11 C; 2 G; 3 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1382 CCGACCTCCTCACCAAGCT 1400
              |||| ||||| ||||| ||
Db          1 CCGAGCTCCTRACCAACCT 19


RESULT 1190
ABK65823/c
ID   ABK65823 standard; DNA; 21 BP.
XX
AC   ABK65823;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human single nucleotide polymorphism #443.
XX
KW   Human; single nucleotide polymorphism; SNP; sickle cell anaemia;
KW   agammaglobulinaemia; diabetes insipidus; Lesch-Nyhan syndrome;
KW   muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease;
KW   familial hypercholesterolaemia; polycystic kidney disease; cancer;
KW   hereditary spherocytosis; Von Willebrand's disease; tuberous sclerosis;
KW   hereditary haemorrhagic telangiectasia; familial colonic polyposis;
KW   Ehlers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease;
KW   acute intermittent porphyria; inflammation; nervous system disorder;
KW   infection; rheumatoid arthritis; multiple sclerosis; diabetes;
KW   systemic lupus erythematosus; Graves disease; longevity; obesity;
KW   baldness; fertility; forensic; paternity testing; ss.
XX
OS   Homo sapiens.
XX
PN   US2002037508-A1.
XX
PD   28-MAR-2002.
XX
PF   18-JAN-2001; 2001US-00765081.
XX
PR   19-JAN-2000; 2000US-0176861P.
XX
PA   (CARG/) CARGILL M.
PA   (IREL/) IRELAND J S.
PA   (LAND/) LANDER E S.
XX
PI   Cargill M,  Ireland JS,  Lander ES;
XX
DR   WPI; 2002-315108/35.
XX
PT   Nucleic acid comprising single nucleotide polymorphisms, useful in
PT   forensics, paternity testing and diagnosis of disease.
XX
PS   Claim 1; Page 92; 96pp; English.
XX
CC   The invention relates to a nucleic acid comprising single nucleotide
CC   polymorphisms (SNPs) associated with diseases. The nucleic acids
CC   comprising the SNPs and probes and primers for detecting them may be used
CC   in assays for the diagnosis of diseases associated with SNPs (such as
```

```
CC   sickle cell anaemia, agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan
CC   syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease,
CC   familial hypercholesterolaemia, polycystic kidney disease, hereditary
CC   spherocytosis, Von Willebrand's disease, tuberous sclerosis, hereditary
CC   haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
CC   syndrome, osteogenesis imperfecta, and acute intermittent porphyria,
CC   symptoms of, or susceptibility to, multifactorial diseases of which a
CC   component is or may be genetic, such as autoimmune diseases,
CC   inflammation, cancer, diseases of the nervous system, and infection by
CC   pathogenic microorganisms, autoimmune diseases including rheumatoid
CC   arthritis, multiple sclerosis, diabetes (insulin-dependent and non-
CC   independent), systemic lupus erythematosus and Graves disease, cancers
CC   including cancers of the bladder, brain, breast, colon, oesophagus,
CC   kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,
CC   skin, stomach and uterus, longevity, appearance (e.g., baldness,
CC   obesity), strength, speed, endurance, fertility, and susceptibility or
CC   receptivity to particular drugs or therapeutic treatments), in forensics
CC   and in paternity testing. ABK65381-ABK65841 represent human single
CC   nucleotide polymorphisms of the invention
XX
SQ   Sequence 21 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   76.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    1;  Mismatches    4;  Indels    0;  Gaps    0;

Qy        201 TGCCCCTGAGCAGATAGGCCT 221
              ||||||||||:  || | |||
Db         21 TGCCCCTGAGYTCATGGTCCT 1


RESULT 1191
ABK40345
ID   ABK40345 standard; DNA; 21 BP.
XX
AC   ABK40345;
XX
DT   15-JUL-2002  (first entry)
XX
DE   Forward PCR primer for human PRO4316 DNA.
XX
KW   Human; PRO; benign tumour; malignant tumour; lymphoid malignancy;
KW   leukaemia; neuronal disorder; stromal disorder; blastocoelic disorder;
KW   inflammatory disorder; immune disorder; angiogenic disorder; cytostatic;
KW   neuroprotective; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200153486-A1.
XX
PD   26-JUL-2001.
XX
PF   11-FEB-2000; 2000WO-US003565.
XX
PR   08-MAR-1999;   99WO-US005028.
PR   11-MAR-1999;   99US-0123972P.
PR   11-MAY-1999;   99US-0133459P.
PR   02-JUN-1999;   99WO-US012252.
PR   22-JUN-1999;   99US-0140650P.
PR   22-JUN-1999;   99US-0140653P.
PR   20-JUL-1999;   99US-0144758P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   17-AUG-1999;   99US-0149395P.
PR   31-AUG-1999;   99US-0151689P.
PR   01-SEP-1999;   99WO-US020111.
PR   15-SEP-1999;   99WO-US021090.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
PR   01-DEC-1999;   99WO-US028634.
PR   05-JAN-2000; 2000WO-US000219.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Goddard A,  Godowski PJ,  Gurney AL,  Hillan KJ;
PI   Marsters SA,  Pan J,  Pitti RM,  Roy MA,  Smith V,  Stone DM;
PI   Watanabe CK,  Wood WI;
XX
DR   WPI; 2002-205567/26.
XX
PT   Thirty five nucleic acids encoding PRO polypeptides, useful for treating
PT   benign or malignant tumors, leukemias and lymphoid malignancies,
PT   inflammatory, angiogenic and immunologic disorders.
XX
PS   Example 24; Page 136; 302pp; English.
XX
CC   The present invention relates to the isolation of novel human PRO
CC   polypeptides (AAU86128-AAU86162) and the polynucleotide sequences
CC   encoding them. The PRO polypeptides, agonists, antagonists or anti-PRO
CC   antibodies are useful for treating benign or malignant tumours (e.g.
CC   renal, kidney, bladder, breast, etc), leukaemias and lymphoid
CC   malignancies, other disorders such as neuronal, glial, astrocytal,
CC   hypothalamic, glandular, macrophagal, stromal and blastocoelic disorders,
CC   inflammatory, immune and angiogenic disorders. The polynucleotide
CC   sequences are also useful in gene therapy. The present sequence
CC   represents a PCR primer used in the methods of the present invention
XX
SQ   Sequence 21 BP; 6 A; 5 C; 8 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        507 GGGCTACCTGGAGAAGCTG 525
              || | ||| ||||||||||
Db          2 GGACGACCAGGAGAAGCTG 20


RESULT 1192
ABS60153/c
ID   ABS60153 standard; DNA; 21 BP.
XX
AC   ABS60153;
XX
DT   05-NOV-2002  (first entry)
XX
DE   Human polymorphism associated DNA sequence #47.
XX
KW   Aminopeptidase P; XPNEP2; bradykinin receptor B1; ds; BDKRB1;
KW   tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH; kallikrein 1;
KW   KLK1; bradykinin receptor B2; BDKRB2; gene therapy;
KW   angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;
KW   polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
KW   cardiovascular disease; angina pectoris; hypertension; heart failure;
KW   myocardial infarction; ventricular hypertrophy; vascular disease;
KW   aneurysm; embolism; thrombosis; coronary artery disease; angioedaema;
KW   arteriosclerosis; atherosclerosis; hypersensitivity; sepsis;
KW   autoimmune disease; inflammatory arthritis; cancer; wound;
KW   viral infection; bacterial infection; fungal infection; COPD;
KW   Chronic obstructive pulmonary disease; enterocolitis.
XX
OS   Homo sapiens.
XX
PN   WO200261131-A2.
XX
PD   08-AUG-2002.
XX
PF   03-DEC-2001; 2001WO-US047235.
XX
PR   04-DEC-2000; 2000US-0251015P.
PR   23-JAN-2001; 2001US-0263678P.
PR   02-MAR-2001; 2001US-0273037P.
XX
PA   (BRIM ) BRISTOL-MYERS SQUIBB CO.
PA   (TSUC/) TSUCHIHASHI Z.
PA   (HUIL/) HUI L.
```

XX
PI Tsuchihashi Z, Hui L, Zerba KE, Ma-Edmonds M, Perrone MH;
PI Swanson BN, Powell JR;
XX
DR WPI; 2002-619265/66.
XX
PT New isolated nucleic acid with at least one polymorphic position, useful
PT for detecting, diagnosing and treating disorders such as angioedema,
PT cancer, viral, bacterial or fungal infection, cardiovascular and
PT autoimmune diseases.
XX
PS Disclosure; Page 706; 977pp; English.
XX
CC The invention relates to an isolated nucleic acid from a human gene
CC encoding aminopeptidase P (XPNEP2), bradykinin receptor B1 (BDKRB1),
CC tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein
CC 1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme
CC 2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one
CC polymorphic position. Also included are (1) a probe that hybridises to a
CC polymorphic position as provided in the detailed summary of single
CC nucleotide polymorphisms comprising additional 5' and 3' flanking genomic
CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising
CC obtaining the sample from one or more individuals and determining the
CC nucleic acid sequence at one or more polymorphic positions in a gene
CC encoding a protein selected from the group above; (3) constructing (M2)
CC haplotypes using the genes comprising grouping at least two nucleic acids
CC ; (4) identifying (M3) an individual at risk of developing a disorder
CC upon administration of an ACE inhibitor and/or vasopeptidase inhibitor
CC using the polymorphic data; (5) a library of nucleic acids, each of which
CC comprises one or more polymorphic positions within a gene encoding a
CC human protein selected from the group above; and (6) genotyping (M4) an
CC individual comprising obtaining a nucleic acid sample, determining the
CC nucleotide present in at least one polymorphic position, and comparing at
CC least one position with a known data set. The genes, (M1, M2, M3 and M4)
CC and compositions are useful for detecting, diagnosing, treating,
CC preventing various disorders such as angioedaema and diseases which
CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
CC disease, trachomas, and cardiovascular diseases like angina pectoris,
CC hypertension, heart failure, myocardial infarction, ventricular
CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
CC artery disease, arteriosclerosis and/or atherosclerosis, and
CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
CC arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic
CC obstructive pulmonary disease (COPD) and enterocolitis (many other
CC diseases and disorders are listed in the specification). The
CC polynucleotides are also useful for chromosome identification. Antibodies
CC against the proteins may be utilised for immunophenotyping of cell lines
CC and biological samples. The present sequence is included in the sequence
CC listing but is not referred to anywhere else in the specification
XX
SQ Sequence 21 BP; 7 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1246 TTCCGTATCTTAGGAACCC 1264
||| || |||| |||||||
Db 21 TTCAGTGTCTTTGGAACCC 3

RESULT 1193
ABS60250
ID ABS60250 standard; DNA; 21 BP.
XX
AC ABS60250;
XX
DT 05-NOV-2002 (first entry)
XX
DE Human polymorphism associated DNA sequence #144.
XX
KW Aminopeptidase P; XPNEP2; bradykinin receptor B1; ds; BDKRB1;
KW tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH; kallikrein 1;
KW KLK1; bradykinin receptor B2; BDKRB2; gene therapy;
KW angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;
KW polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
KW cardiovascular disease; angina pectoris; hypertension; heart failure;
KW myocardial infarction; ventricular hypertrophy; vascular disease;
KW aneurysm; embolism; thrombosis; coronary artery disease; angioedaema;
KW arteriosclerosis; atherosclerosis; hypersensitivity; sepsis;
KW autoimmune disease; inflammatory arthritis; cancer; wound;
KW viral infection; bacterial infection; fungal infection; COPD;
KW Chronic obstructive pulmonary disease; enterocolitis.
XX
OS Homo sapiens.
XX
PN WO200261131-A2.
XX
PD 08-AUG-2002.
XX
PF 03-DEC-2001; 2001WO-US047235.
XX
PR 04-DEC-2000; 2000US-0251015P.
PR 23-JAN-2001; 2001US-0263678P.
PR 02-MAR-2001; 2001US-0273037P.
XX
PA (BRIM) BRISTOL-MYERS SQUIBB CO.
PA (TSUC/) TSUCHIHASHI Z.
PA (HUIL/) HUI L.
XX
PI Tsuchihashi Z, Hui L, Zerba KE, Ma-Edmonds M, Perrone MH;
PI Swanson BN, Powell JR;
XX
DR WPI; 2002-619265/66.
XX
PT New isolated nucleic acid with at least one polymorphic position, useful
PT for detecting, diagnosing and treating disorders such as angioedema,
PT cancer, viral, bacterial or fungal infection, cardiovascular and
PT autoimmune diseases.
XX
PS Disclosure; Page 722; 977pp; English.
XX
CC The invention relates to an isolated nucleic acid from a human gene
CC encoding aminopeptidase P (XPNEP2), bradykinin receptor B1 (BDKRB1),
CC tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein
CC 1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme
CC 2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one
CC polymorphic position. Also included are (1) a probe that hybridises to a
CC polymorphic position as provided in the detailed summary of single
CC nucleotide polymorphisms comprising additional 5' and 3' flanking genomic
CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising
CC obtaining the sample from one or more individuals and determining the
CC nucleic acid sequence at one or more polymorphic positions in a gene
CC encoding a protein selected from the group above; (3) constructing (M2)
CC haplotypes using the genes comprising grouping at least two nucleic acids
CC ; (4) identifying (M3) an individual at risk of developing a disorder
CC upon administration of an ACE inhibitor and/or vasopeptidase inhibitor
CC using the polymorphic data; (5) a library of nucleic acids, each of which
CC comprises one or more polymorphic positions within a gene encoding a
CC human protein selected from the group above; and (6) genotyping (M4) an
CC individual comprising obtaining a nucleic acid sample, determining the
CC nucleotide present in at least one polymorphic position, and comparing at
CC least one position with a known data set. The genes, (M1, M2, M3 and M4)
CC and compositions are useful for detecting, diagnosing, treating,
CC preventing various disorders such as angioedaema and diseases which
CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
CC disease, trachomas, and cardiovascular diseases like angina pectoris,
CC hypertension, heart failure, myocardial infarction, ventricular
CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
CC artery disease, arteriosclerosis and/or atherosclerosis, and
CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
CC arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic
CC obstructive pulmonary disease (COPD) and enterocolitis (many other
CC diseases and disorders are listed in the specification). The
CC polynucleotides are also useful for chromosome identification. Antibodies
CC against the proteins may be utilised for immunophenotyping of cell lines

```
CC   and biological samples. The present sequence is included in the sequence
CC   listing but is not referred to anywhere else in the specification
XX
SQ   Sequence 21 BP; 5 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1537 AAGGAGGCCAGCCTTCGGT 1555
              |||| || ||| |||||||
Db          2 AAGGTGGACAGTCTTCGGT 20


RESULT 1194
ABS60249
ID   ABS60249 standard; DNA; 21 BP.
XX
AC   ABS60249;
XX
DT   05-NOV-2002  (first entry)
XX
DE   Human polymorphism associated DNA sequence #143.
XX
KW   Aminopeptidase P; XPNEP2; bradykinin receptor B1; ds; BDKRB1;
KW   tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH; kallikrein 1;
KW   KLK1; bradykinin receptor B2; BDKRB2; gene therapy;
KW   angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;
KW   polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
KW   cardiovascular disease; angina pectoris; hypertension; heart failure;
KW   myocardial infarction; ventricular hypertrophy; vascular disease;
KW   aneurysm; embolism; thrombosis; coronary artery disease; angioedaema;
KW   arteriosclerosis; atherosclerosis; hypersensitivity; sepsis;
KW   autoimmune disease; inflammatory arthritis; cancer; wound;
KW   viral infection; bacterial infection; fungal infection; COPD;
KW   Chronic obstructive pulmonary disease; enterocolitis.
XX
OS   Homo sapiens.
XX
PN   WO200261131-A2.
XX
PD   08-AUG-2002.
XX
PF   03-DEC-2001; 2001WO-US047235.
XX
PR   04-DEC-2000; 2000US-0251015P.
PR   23-JAN-2001; 2001US-0263678P.
PR   02-MAR-2001; 2001US-0273037P.
XX
PA   (BRIM ) BRISTOL-MYERS SQUIBB CO.
PA   (TSUC/) TSUCHIHASHI Z.
PA   (HUIL/) HUI L.
XX
PI   Tsuchihashi Z,  Hui L,  Zerba KE,  Ma-Edmonds M,  Perrone MH;
PI   Swanson BN,  Powell JR;
XX
DR   WPI; 2002-619265/66.
XX
PT   New isolated nucleic acid with at least one polymorphic position, useful
PT   for detecting, diagnosing and treating disorders such as angioedema,
PT   cancer, viral, bacterial or fungal infection, cardiovascular and
PT   autoimmune diseases.
XX
PS   Disclosure; Page 721; 977pp; English.
XX
CC   The invention relates to an isolated nucleic acid from a human gene
CC   encoding aminopeptidase P (XPNEP2), bradykinin receptor B1 (BDKRB1),
CC   tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein
CC   1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme
CC   2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one
CC   polymorphic position. Also included are (1) a probe that hybridises to a
CC   polymorphic position as provided in the detailed summary of single
CC   nucleotide polymorphisms comprising additional 5' and 3' flanking genomic
CC   sequence; (2) analysing (M1) at least one nucleic acid sample comprising
CC   obtaining the sample from one or more individuals and determining the
CC   nucleic acid sequence at one or more polymorphic positions in a gene
CC   encoding a protein selected from the group above; (3) constructing (M2)
CC   haplotypes using the genes comprising grouping at least two nucleic acids
CC   ; (4) identifying (M3) an individual at risk of developing a disorder
CC   upon administration of an ACE inhibitor and/or vasopeptidase inhibitor
CC   using the polymorphic data; (5) a library of nucleic acids, each of which
CC   comprises one or more polymorphic positions within a gene encoding a
CC   human protein selected from the group above; and (6) genotyping (M4) an
CC   individual comprising obtaining a nucleic acid sample, determining the
CC   nucleotide present in at least one polymorphic position, and comparing at
CC   least one position with a known data set. The genes, (M1, M2, M3 and M4)
CC   and compositions are useful for detecting, diagnosing, treating,
CC   preventing various disorders such as angioedaema and diseases which
CC   involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
CC   disease, trachomas, and cardiovascular diseases like angina pectoris,
CC   hypertension, heart failure, myocardial infarction, ventricular
CC   hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
CC   artery disease, arteriosclerosis and/or atherosclerosis, and
CC   hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
CC   arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic
CC   obstructive pulmonary disease (COPD) and enterocolitis (many other
CC   diseases and disorders are listed in the specification). The
CC   polynucleotides are also useful for chromosome identification. Antibodies
CC   against the proteins may be utilised for immunophenotyping of cell lines
CC   and biological samples. The present sequence is included in the sequence
CC   listing but is not referred to anywhere else in the specification
XX
SQ   Sequence 21 BP; 5 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1537 AAGGAGGCCAGCCTTCGGT 1555
              |||| || ||| |||||||
Db          2 AAGGTGGACAGTCTTCGGT 20


RESULT 1195
ABS60767/c
ID   ABS60767 standard; DNA; 21 BP.
XX
AC   ABS60767;
XX
DT   05-NOV-2002  (first entry)
XX
DE   Human polymorphism associated DNA sequence #404.
XX
KW   Aminopeptidase P; XPNEP2; bradykinin receptor B1; ds; BDKRB1;
KW   tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH; kallikrein 1;
KW   KLK1; bradykinin receptor B2; BDKRB2; gene therapy;
KW   angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;
KW   polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
KW   cardiovascular disease; angina pectoris; hypertension; heart failure;
KW   myocardial infarction; ventricular hypertrophy; vascular disease;
KW   aneurysm; embolism; thrombosis; coronary artery disease; angioedaema;
KW   arteriosclerosis; atherosclerosis; hypersensitivity; sepsis;
KW   autoimmune disease; inflammatory arthritis; cancer; wound;
KW   viral infection; bacterial infection; fungal infection; COPD;
KW   Chronic obstructive pulmonary disease; enterocolitis.
XX
OS   Homo sapiens.
XX
PN   WO200261131-A2.
XX
PD   08-AUG-2002.
XX
PF   03-DEC-2001; 2001WO-US047235.
XX
PR   04-DEC-2000; 2000US-0251015P.
PR   23-JAN-2001; 2001US-0263678P.
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PR   02-MAR-2001; 2001US-0273037P.
XX
PA   (BRIM ) BRISTOL-MYERS SQUIBB CO.
PA   (TSUC/) TSUCHIHASHI Z.
PA   (HUIL/) HUI L.
XX
PI   Tsuchihashi Z,  Hui L,  Zerba KE,  Ma-Edmonds M,  Perrone MH;
PI   Swanson BN,  Powell JR;
XX
DR   WPI; 2002-619265/66.
XX
PT   New isolated nucleic acid with at least one polymorphic position, useful
PT   for detecting, diagnosing and treating disorders such as angioedema,
PT   cancer, viral, bacterial or fungal infection, cardiovascular and
PT   autoimmune diseases.
XX
PS   Disclosure; Page 876; 977pp; English.
XX
CC   The invention relates to an isolated nucleic acid from a human gene
CC   encoding aminopeptidase P (XPNEP2), bradykinin receptor B1 (BDKRB1),
CC   tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein
CC   1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme
CC   2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one
CC   polymorphic position. Also included are (1) a probe that hybridises to a
CC   polymorphic position as provided in the detailed summary of single
CC   nucleotide polymorphisms comprising additional 5' and 3' flanking genomic
CC   sequence; (2) analysing (M1) at least one nucleic acid sample comprising
CC   obtaining the sample from one or more individuals and determining the
CC   nucleic acid sequence at one or more polymorphic positions in a gene
CC   encoding a protein selected from the group above; (3) constructing (M2)
CC   haplotypes using the genes comprising grouping at least two nucleic acids
CC   ; (4) identifying (M3) an individual at risk of developing a disorder
CC   upon administration of an ACE inhibitor and/or vasopeptidase inhibitor
CC   using the polymorphic data; (5) a library of nucleic acids, each of which
CC   comprises one or more polymorphic positions within a gene encoding a
CC   human protein selected from the group above; and (6) genotyping (M4) an
CC   individual comprising obtaining a nucleic acid sample, determining the
CC   nucleotide present in at least one polymorphic position, and comparing at
CC   least one position with a known data set. The genes, (M1, M2, M3 and M4)
CC   and compositions are useful for detecting, diagnosing, treating,
CC   preventing various disorders such as angioedaema and diseases which
CC   involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
CC   disease, trachomas, and cardiovascular diseases like angina pectoris,
CC   hypertension, heart failure, myocardial infarction, ventricular
CC   hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
CC   artery disease, arteriosclerosis and/or atherosclerosis, and
CC   hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
CC   arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic
CC   obstructive pulmonary disease (COPD) and enterocolitis (many other
CC   diseases and disorders are listed in the specification). The
CC   polynucleotides are also useful for chromosome identification. Antibodies
CC   against the proteins may be utilised for immunophenotyping of cell lines
CC   and biological samples. The present sequence is included in the sequence
CC   listing but is not referred to anywhere else in the specification
XX
SQ   Sequence 21 BP; 7 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1246 TTCCGTATCTTAGGAACCC 1264
              ||| || |||| |||||||
Db         21 TTCAGTGTCTTTGGAACCC 3


RESULT 1196
ABQ61245
ID   ABQ61245 standard; DNA; 21 BP.
XX
AC   ABQ61245;
XX
DT   03-OCT-2002  (first entry)
XX
DE   Human aquaporin 5 (AQP5) gene PCR primer 3.
XX
KW   Human; ss; PCR; primer; aquaporin; AQP5; AQP; water channel protein;
KW   oligonucleotide chip; OGN chip; cDNA chip; lung cancer;
KW   mutation detection; polymorphism detection; gene expression.
XX
OS   Homo sapiens.
XX
PN   WO200220787-A1.
XX
PD   14-MAR-2002.
XX
PF   10-SEP-2001; 2001WO-KR001528.
XX
PR   09-SEP-2000; 2000KR-00053821.
XX
PA   (GOOD-) GOODGENE INC.
PA   (MOON/) MOON W.
PA   (MOON/) MOON C.
XX
PI   Moon W,  Moon C,  Moon Y,  Kim B,  Kim D,  Shin C,  Um T,  Kim H;
PI   Song M,  Kim H,  Song S;
XX
DR   WPI; 2002-393847/42.
XX
PT   Novel aquaporin 5 gene mutant useful for diagnosing lung, stomach, colon,
PT   prostate, or head or neck cancer.
XX
PS   Example 2; Page 148; 154pp; English.
XX
CC   The invention comprises a mutant form of the human aquaporin 5 (AQP5)
CC   gene. Aquaporin (AQP) is a family of water channel proteins, through
CC   which water is transported into and out of cells - ten types of mammalian
CC   AQP have been identified so far. The invention also comprises an
CC   oligonucleotide (OGN) chip having 902 oligonucleotide primer sequences
CC   and a cDNA chip comprising one or more sequences from the human AQP5
CC   gene. The mutant AQP5 gene is useful for diagnosing cancer (i.e lung
CC   cancer). The OGN chip is useful for detecting mutations and polymorphisms
CC   in AQP5 and the cDNA chip is useful for analysis of gene expression. The
CC   present DNA sequence represents a human aquaporin (AQP) gene PCR primer
XX
SQ   Sequence 21 BP; 3 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1036 TTTGGCCTGGCCCGAGCCA 1054
              ||||||||||||  || ||
Db          3 TTTGGCCTGGCCATAGGCA 21


RESULT 1197
ABQ61241
ID   ABQ61241 standard; DNA; 21 BP.
XX
AC   ABQ61241;
XX
DT   03-OCT-2002  (first entry)
XX
DE   Human aquaporin 5 (AQP5) gene PCR primer 1.
XX
KW   Human; ss; PCR; primer; aquaporin; AQP5; AQP; water channel protein;
KW   oligonucleotide chip; OGN chip; cDNA chip; lung cancer;
KW   mutation detection; polymorphism detection; gene expression.
XX
OS   Homo sapiens.
XX
PN   WO200220787-A1.
XX
PD   14-MAR-2002.
XX
```

```
PF   10-SEP-2001; 2001WO-KR001528.
XX
PR   09-SEP-2000; 2000KR-00053821.
XX
PA   (GOOD-) GOODGENE INC.
PA   (MOON/) MOON W.
PA   (MOON/) MOON C.
XX
PI   Moon W,  Moon C,  Moon Y,  Kim B,  Kim D,  Shin C,  Um T,  Kim H;
PI   Song M,  Kim H,  Song S;
XX
DR   WPI; 2002-393847/42.
XX
PT   Novel aquaporin 5 gene mutant useful for diagnosing lung, stomach, colon,
PT   prostate, or head or neck cancer.
XX
PS   Example 1; Page 146; 154pp; English.
XX
CC   The invention comprises a mutant form of the human aquaporin 5 (AQP5)
CC   gene. Aquaporin (AQP) is a family of water channel proteins, through
CC   which water is transported into and out of cells - ten types of mammalian
CC   AQP have been identified so far. The invention also comprises an
CC   oligonucleotide (OGN) chip having 902 oligonucleotide primer sequences
CC   and a cDNA chip comprising one or more sequences from the human AQP5
CC   gene. The mutant AQP5 gene is useful for diagnosing cancer (i.e lung
CC   cancer). The OGN chip is useful for detecting mutations and polymorphisms
CC   in AQP5 and the cDNA chip is useful for analysis of gene expression. The
CC   present DNA sequence represents a human aquaporin (AQP) gene PCR primer
XX
SQ   Sequence 21 BP; 3 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1036 TTTGGCCTGGCCCGAGCCA 1054
              ||||||||||||  || ||
Db          3 TTTGGCCTGGCCATAGGCA 21


RESULT 1198
ABQ61247
ID   ABQ61247 standard; DNA; 21 BP.
XX
AC   ABQ61247;
XX
DT   03-OCT-2002  (first entry)
XX
DE   Human aquaporin 5 (AQP5) gene PCR primer 5.
XX
KW   Human; ss; PCR; primer; aquaporin; AQP5; AQP; water channel protein;
KW   oligonucleotide chip; OGN chip; cDNA chip; lung cancer;
KW   mutation detection; polymorphism detection; gene expression.
XX
OS   Homo sapiens.
XX
PN   WO200220787-A1.
XX
PD   14-MAR-2002.
XX
PF   10-SEP-2001; 2001WO-KR001528.
XX
PR   09-SEP-2000; 2000KR-00053821.
XX
PA   (GOOD-) GOODGENE INC.
PA   (MOON/) MOON W.
PA   (MOON/) MOON C.
XX
PI   Moon W,  Moon C,  Moon Y,  Kim B,  Kim D,  Shin C,  Um T,  Kim H;
PI   Song M,  Kim H,  Song S;
XX
DR   WPI; 2002-393847/42.
XX
PT   Novel aquaporin 5 gene mutant useful for diagnosing lung, stomach, colon,
PT   prostate, or head or neck cancer.
XX
PS   Disclosure; Page 148; 154pp; English.
XX
CC   The invention comprises a mutant form of the human aquaporin 5 (AQP5)
CC   gene. Aquaporin (AQP) is a family of water channel proteins, through
CC   which water is transported into and out of cells - ten types of mammalian
CC   AQP have been identified so far. The invention also comprises an
CC   oligonucleotide (OGN) chip having 902 oligonucleotide primer sequences
CC   and a cDNA chip comprising one or more sequences from the human AQP5
CC   gene. The mutant AQP5 gene is useful for diagnosing cancer (i.e lung
CC   cancer). The OGN chip is useful for detecting mutations and polymorphisms
CC   in AQP5 and the cDNA chip is useful for analysis of gene expression. The
CC   present DNA sequence represents a human aquaporin (AQP) gene PCR primer
XX
SQ   Sequence 21 BP; 3 A; 6 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1036 TTTGGCCTGGCCCGAGCCA 1054
              ||||||||||||  || ||
Db          3 TTTGGCCTGGCCATAGGCA 21


RESULT 1199
ABL43257
ID   ABL43257 standard; DNA; 21 BP.
XX
AC   ABL43257;
XX
DT   11-APR-2002  (first entry)
XX
DE   Human chromosome 1p36-35 PCR primer SEQ ID NO:301.
XX
KW   Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW   PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   JP2001321190-A.
XX
PD   20-NOV-2001.
XX
PF   12-MAR-2001; 2001JP-00068285.
XX
PR   10-MAR-2000; 2000JP-00066716.
XX
PA   (RIKA ) RIKAGAKU KENKYUSHO.
PA   (GENO-) GENOTEX YG.
XX
DR   WPI; 2002-144136/19.
XX
PT   Arraying genome clones.
XX
PS   Claim 4; Page 10; 528pp; Japanese.
XX
CC   The present invention describes a method of arraying genome clones. The
CC   method comprises: (a) clones of the genomic libraries contained in
CC   multiwell plates numbered for discrimination are mixed in each of the
CC   multiwell plates; (b) a primer designed based on the chromosome marker
CC   sequence is added to the mixture to carry out an amplification reaction;
CC   (c) a signal corresponding to the marker is detected from the resultant
CC   amplified product to specify the discrimination Nos. of the multiwell
CC   plates containing the clones having said marker sequence; (d) the order
CC   of the markers is changed so that the same discrimination Nos. succeed to
CC   the maximum in the specified discrimination Nos. to array the multiwell
CC   plates; (e) the clones in the multiwell plates of the specified
CC   discrimination Nos. are mixed respectively in each wells of longitudinal
CC   and lateral directions; (f) the mixed clones are cultured and the
CC   resultant cultures are amplified by using the above primer; (g) signals
```

CC are detected from the amplified products; (h) the clones in the multiwell
CC plates are specified from the detected result; and (i) the clones are
CC reconstituted as the positions on the chromosome and arrayed. The
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC represent PCR primers for human chromosome 21q22.1, which are
CC specifically claimed for use in the present invention
XX
SQ Sequence 21 BP; 7 A; 5 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 597 CTTTGGGAAACTGGAGACC 615
| || ||||||||||||||
Db 3 CATTCAGAAACTGGAGACC 21

RESULT 1200
ABN88844
ID ABN88844 standard; RNA; 21 BP.
XX
AC ABN88844;
XX
DT 21-AUG-2002 (first entry)
XX
DE Rat metallothionein MT-II target sequence SEQ ID NO:47.
XX
KW Apoptosis-inducing ribozyme; hammerhead ribozyme; ribozyme; MT;
KW metallothionein; cancer; tumour; ss.
XX
OS Rattus sp.
XX
PN WO200236740-A2.
XX
PD 10-MAY-2002.
XX
PF 31-OCT-2001; 2001WO-US046062.
XX
PR 31-OCT-2000; 2000US-0244709P.
XX
PA (UYMA-) UNIV MASSACHUSETTS MEDICAL CENT.
XX
PI Lee K, Lau K, Ho S;
XX
DR WPI; 2002-479757/51.
XX
PT New ribozymes directed against metallothionein mRNAs, useful for inducing
PT apoptosis in human cancer cells, for inhibiting tumor growth and for
PT enhancing the effectiveness of chemotherapy or radiation therapy against
PT cancer cells.
XX
PS Example 2; Fig 2B; 63pp; English.
XX
CC The present invention describes a ribozyme comprising Hu MT-Ia Rz, Hu MT-
CC Ie/r Rz, Hu MT-If Rz, Hu MT-Ib Rz, Hu MT-Ighlx/-II Rz, Rz1-2, or Rz4-9
CC (see ABN88812 to ABN88818). The ribozymes have cytostatic activity. The
CC ribozymes are targeted to metallothionein (MT) and so are metallothionein
CC inhibitors and apoptosis inducers. The ribozymes are useful for inducing
CC apoptosis in human cancer cells, for inhibiting tumour growth, and for
CC enhancing the effectiveness of chemotherapy or radiation therapy against
CC cancer cells. The ribozyme-based methods for treating cancer, from the
CC present invention, offer the following advantages over conventional
CC antisense-based methods of limiting metallothionein production in target
CC cells: (1) ribozymes destroy metallothionein-encoding mRNAs rather than
CC merely hybridising them; (2) ribozymes act like enzymes and each molecule
CC can be recycled to degrade multiple mRNA molecules; (3) a ribozyme need
CC not have perfect complementarity with a target mRNA to destroy the RNA;
CC and (4) a single ribozyme can be designed to destroy several related
CC mRNAs that encode different metallothioneins more readily than a
CC conventional antisense molecule can be designed to be effective against
CC various mRNAs. ABN88819 to ABN88870 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 21 BP; 6 A; 4 C; 8 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 68.4%; Pred. No. 9.1e+02;
Matches 13; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

Qy 1167 GGGCTGCATCTTCTATGAG 1185
|||| ||| :|: | | |||
Db 2 GGGCUGCAUCUGCAAAGAG 20

RESULT 1201
ABS97586/c
ID ABS97586 standard; DNA; 21 BP.
XX
AC ABS97586;
XX
DT 23-DEC-2002 (first entry)
XX
DE Human epoxide hydroylase 2 polymorphic sequence #77.
XX
KW Human; ds; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;
KW cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;
KW adrenergic receptor beta1; ADBR1; aryl hydrocarbon; AHR; MRP3; NR1I2;
KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
KW cyclooxgenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
KW epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
KW NADPH quinone oxidoreductase 2; NQO2; sulfotransferase thermolabile; STM;
KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;
KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
KW multidrug resistance associated protein 3; cancer; prostate;
KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
KW altered drug metabolism; cardiovascular function; colorectal tumour;
KW central nervous system; pulmonary; immunological; SNP;
KW single nucleotide polymorphism.
XX
OS Homo sapiens.
XX
PN WO200257410-A2.
XX
PD 25-JUL-2002.
XX
PF 28-NOV-2001; 2001WO-US044838.
XX
PR 28-NOV-2000; 2000US-00724389.
XX
PA (DNAS-) DNA SCI LAB INC.
XX
PI Guida M, Hall J;
XX
DR WPI; 2002-698522/75.
XX
PT Isolated nucleic acid molecules having polymorphisms in known human genes
PT e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers
PT for locating, identifying and characterizing the genes responsible for
PT disorder-related traits.
XX
PS Example 10; Page 119; 714pp; English.
XX
CC This invention relates to the sequence of an isolated nucleic acid
CC molecule comprising at least one base variation from that of a known
CC human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),
CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC (ARNT), cathepsin S (CTSS), cyclooxgenase 2 (COX2), diazepam binding
CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
CC transferase (HNMT), (kallikrein 2) KLK2, nicotinamide -N-methyl

CC transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC sulfotransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance 1
CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
CC (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic
CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
CC The polymorphisms in the human genes cited in the invention are useful as
CC genetic linkage markers for locating and characterising the genes that
CC are responsible for specific traits within the genome and eventually
CC identifying the genes responsible for a variety of disorder-related
CC traits as a result of their e.g., overexpression, constitutive
CC expression, mutation or underexpression, which may be used in diagnosing
CC and/or treating the disorders. The nucleic acid molecules comprising the
CC polymorphic sequences contained in CYP4501A1, CYPP4501A2, CYP4502E1,
CC ARNT, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
CC metabolism. The polymorphic sequences contained in CYP4501A1, CYPP4501A2,
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
CC used to screen for altered cardiovascular function, in COX2 for altered
CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
CC nervous system function, in FLAP and HNMT for altered pulmonary,
CC immunological or haematological function, in KLK2 for altered serine
CC protease activity in the prostate, in LTF for altered immunological or
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC peripheral nervous system function. The present sequence represents a
CC polymorphic DNA sequence of the invention
XX
SQ Sequence 21 BP; 3 A; 9 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1644 GCTGGAGGGATGCCACACC 1662
| |||| ||||| ||||||
Db 21 GGTGGAAGGATGGCACACC 3

RESULT 1202
ABS97587/c
ID ABS97587 standard; DNA; 21 BP.
XX
AC ABS97587;
XX
DT 23-DEC-2002 (first entry)
XX
DE Human epoxide hydroylase 2 polymorphic sequence #78.
XX
KW Human; ds; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;
KW cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;
KW adrenergic receptor beta1; ADBR1; aryl hydrocarbon; AHR; MRP3; NR1I2;
KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
KW cyclooxgenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
KW epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
KW NADPH quinone oxidoreductase 2; NQO2; sulfotransferase thermolabile; STM;
KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;
KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
KW multidrug resistance associated protein 3; cancer; prostate;
KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
KW altered drug metabolism; cardiovascular function; colorectal tumour;
KW central nervous system; pulmonary; immunological; SNP;
KW single nucleotide polymorphism.
XX
OS Homo sapiens.
XX
PN WO200257410-A2.
XX
PD 25-JUL-2002.
XX
PF 28-NOV-2001; 2001WO-US044838.
XX
PR 28-NOV-2000; 2000US-00724389.
XX
PA (DNAS-) DNA SCI LAB INC.
XX
PI Guida M, Hall J;
XX
DR WPI; 2002-698522/75.
XX
PT Isolated nucleic acid molecules having polymorphisms in known human genes
PT e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers
PT for locating, identifying and characterizing the genes responsible for
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XX
PS Example 10; Page 119; 714pp; English.
XX
CC This invention relates to the sequence of an isolated nucleic acid
CC molecule comprising at least one base variation from that of a known
CC human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),
CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC (ARNT), cathepsin S (CTSS), cyclooxgenase 2 (COX2), diazepam binding
CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
CC transferase (HNMT), (kallikrein 2) KLK2, nicotinamide -N-methyl
CC transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC sulfotransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance 1
CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
CC (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic
CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
CC The polymorphisms in the human genes cited in the invention are useful as
CC genetic linkage markers for locating and characterising the genes that
CC are responsible for specific traits within the genome and eventually
CC identifying the genes responsible for a variety of disorder-related
CC traits as a result of their e.g., overexpression, constitutive
CC expression, mutation or underexpression, which may be used in diagnosing
CC and/or treating the disorders. The nucleic acid molecules comprising the
CC polymorphic sequences contained in CYP4501A1, CYPP4501A2, CYP4502E1,
CC ARNT, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
CC metabolism. The polymorphic sequences contained in CYP4501A1, CYPP4501A2,
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
CC used to screen for altered cardiovascular function, in COX2 for altered
CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
CC nervous system function, in FLAP and HNMT for altered pulmonary,
CC immunological or haematological function, in KLK2 for altered serine
CC protease activity in the prostate, in LTF for altered immunological or
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC peripheral nervous system function. The present sequence represents a
CC polymorphic DNA sequence of the invention
XX
SQ Sequence 21 BP; 3 A; 9 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1644 GCTGGAGGGATGCCACACC 1662
| |||| ||||| ||||||
Db 21 GGTGGAAGGATGGCACACC 3

RESULT 1203
ABK16378
ID ABK16378 standard; DNA; 21 BP.
XX
AC ABK16378;
XX

```
DT   14-MAR-2002  (first entry)
XX
DE   Human adipose protein, adp, PCR primer #8.
XX
KW   Adipose protein; ss; adp; obesity; transgenic animal; obesity;
KW   adipositas; bulimia; wasting; cachexia; eating disorder;
KW   body weight disorder; weight loss; cancer; infectious disease;
KW   hypogonadism; Prader-Willi syndrome; Laurence-Moon-Biedl syndrome;
KW   hypothyroidism; diabetes; Cushing's syndrome; endocrine disorder;
KW   gastrointestinal diseases; inflammatory bowel disease; PCR primer;
KW   ulcerative colitis; anorexia nervosa; glycogen storage disease;
KW   lipid storage disease; lipoma; liposarcoma; heart disease; hypertension;
KW   infertility; acquired immunodeficiency syndrome; AIDS.
XX
OS   Homo sapiens.
XX
PN   WO200196371-A2.
XX
PD   20-DEC-2001.
XX
PF   13-JUN-2001; 2001WO-EP006713.
XX
PR   16-JUN-2000; 2000US-0211914P.
PR   23-JUN-2000; 2000EP-00113049.
PR   28-JUN-2000; 2000US-0214518P.
PR   17-APR-2001; 2001EP-00109537.
XX
PA   (DEVE-) DEVELOGEN AG.
XX
PI   Broenner G,  Ciossek T,  Dohrmann C,  Haeder T,  Rothe M;
XX
DR   WPI; 2002-106464/14.
XX
PT   Novel nucleic acid encoding adipose polypeptide which regulates, causes
PT   or contributes to obesity, useful for treating obesity, heart disease,
PT   hypertension, infertility, and controlling weight loss in cancer
PT   patients.
XX
PS   Claim 1; Page 171; 188pp; English.
XX
CC   The invention relates to a nucleic acid encoding a adipose (ADP)
CC   polypeptide which regulates, causes or contributes to obesity in an
CC   animal or a human. The polynucleotides, proteins, ant-adp antibodies,
CC   modulators of adp activity, adp antisense nucleic acids, expression
CC   vectors, adp transgenic animals are useful in the diagnosis and treatment
CC   of obesity, adipositas, bulimia, wasting (cachexia), eating disorders
CC   and/or disorders of body weight/body mass, weight loss due to cancer or
CC   infectious diseases, genetic disorders associated with hypogonadism e.g.
CC   Prader-Willi syndrome, Laurence-Moon-Biedl syndrome, hypothyroidism,
CC   diabetes, Cushing's syndrome, endocrine disorders, gastrointestinal
CC   diseases, inflammatory bowel disease, ulcerative colitis, and anorexia
CC   nervosa. They are also useful for treating disorders of body weight/mass
CC   e.g. glycogen storage diseases, and lipid storage diseases and for
CC   treating lipomas, and/or liposarcomas. The compositions are also useful
CC   for treating heart disease, hypertension, and infertility and for
CC   treating conditions associated with under weight e.g. enhancing or
CC   controlling fertility, controlling weight loss in acquired
CC   immunodeficiency syndrome (AIDS) or cancer patients. The present sequence
CC   is a PCR primer used to amplify an adp nucleic acid
XX
SQ   Sequence 21 BP; 4 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1029 GGCTGACTTTGGCCTGGCC 1047
              |||  ||||| ||||||||
Db          3 GGCACACTTTCGCCTGGCC 21


RESULT 1204
ABK16377/c
```

```
ID   ABK16377 standard; DNA; 21 BP.
XX
AC   ABK16377;
XX
DT   14-MAR-2002  (first entry)
XX
DE   Human adipose protein, adp, PCR primer #7.
XX
KW   Adipose protein; ss; adp; obesity; transgenic animal; obesity;
KW   adipositas; bulimia; wasting; cachexia; eating disorder;
KW   body weight disorder; weight loss; cancer; infectious disease;
KW   hypogonadism; Prader-Willi syndrome; Laurence-Moon-Biedl syndrome;
KW   hypothyroidism; diabetes; Cushing's syndrome; endocrine disorder;
KW   gastrointestinal diseases; inflammatory bowel disease; PCR primer;
KW   ulcerative colitis; anorexia nervosa; glycogen storage disease;
KW   lipid storage disease; lipoma; liposarcoma; heart disease; hypertension;
KW   infertility; acquired immunodeficiency syndrome; AIDS.
XX
OS   Homo sapiens.
XX
PN   WO200196371-A2.
XX
PD   20-DEC-2001.
XX
PF   13-JUN-2001; 2001WO-EP006713.
XX
PR   16-JUN-2000; 2000US-0211914P.
PR   23-JUN-2000; 2000EP-00113049.
PR   28-JUN-2000; 2000US-0214518P.
PR   17-APR-2001; 2001EP-00109537.
XX
PA   (DEVE-) DEVELOGEN AG.
XX
PI   Broenner G,  Ciossek T,  Dohrmann C,  Haeder T,  Rothe M;
XX
DR   WPI; 2002-106464/14.
XX
PT   Novel nucleic acid encoding adipose polypeptide which regulates, causes
PT   or contributes to obesity, useful for treating obesity, heart disease,
PT   hypertension, infertility, and controlling weight loss in cancer
PT   patients.
XX
PS   Claim 1; Page 171; 188pp; English.
XX
CC   The invention relates to a nucleic acid encoding a adipose (ADP)
CC   polypeptide which regulates, causes or contributes to obesity in an
CC   animal or a human. The polynucleotides, proteins, ant-adp antibodies,
CC   modulators of adp activity, adp antisense nucleic acids, expression
CC   vectors, adp transgenic animals are useful in the diagnosis and treatment
CC   of obesity, adipositas, bulimia, wasting (cachexia), eating disorders
CC   and/or disorders of body weight/body mass, weight loss due to cancer or
CC   infectious diseases, genetic disorders associated with hypogonadism e.g.
CC   Prader-Willi syndrome, Laurence-Moon-Biedl syndrome, hypothyroidism,
CC   diabetes, Cushing's syndrome, endocrine disorders, gastrointestinal
CC   diseases, inflammatory bowel disease, ulcerative colitis, and anorexia
CC   nervosa. They are also useful for treating disorders of body weight/mass
CC   e.g. glycogen storage diseases, and lipid storage diseases and for
CC   treating lipomas, and/or liposarcomas. The compositions are also useful
CC   for treating heart disease, hypertension, and infertility and for
CC   treating conditions associated with under weight e.g. enhancing or
CC   controlling fertility, controlling weight loss in acquired
CC   immunodeficiency syndrome (AIDS) or cancer patients. The present sequence
CC   is a PCR primer used to amplify an adp nucleic acid
XX
SQ   Sequence 21 BP; 4 A; 5 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1029 GGCTGACTTTGGCCTGGCC 1047
              |||  ||||| ||||||||
Db         19 GGCACACTTTCGCCTGGCC 1
```

```
RESULT 1205
ABL61474
ID   ABL61474 standard; DNA; 21 BP.
XX
AC   ABL61474;
XX
DT   17-SEP-2002  (first entry)
XX
DE   Human UGT1A7 codon 11 polymorphism associated primer A.
XX
KW   UGT1A7; uridine diphosphate-5'-glucuronosyl transferase; UGP; primer;
KW   carcinoma; inflammatory bowel disease; genetic predisposition; colon;
KW   polymorphism; UGT1A7*2; UGT1A7*3; UGT1A7*4; antitumour; cytostatic;
KW   antiinflammatory; gene therapy; diagnosis; pancreas; liver; stomach;
KW   oesophagus; ss.
XX
OS   Homo sapiens.
XX
PN   WO200253770-A2.
XX
PD   11-JUL-2002.
XX
PF   03-JAN-2002; 2002WO-DE000003.
XX
PR   05-JAN-2001; 2001DE-01000238.
XX
PA   (MEDI-) MEDIZINISCHE HOCHSCHULE HANNOVER.
XX
PI   Manns M, Strassburg C;
XX
DR   WPI; 2002-509023/54.
XX
PT   Diagnosing, and predicting risk, of carcinoma and inflammatory bowel
PT   disease, comprises detecting polymorphisms in the gene for uridine
PT   diphosphate-5'-glucuronosyl transferase.
XX
PS   Example 1; Page 12; 26pp; German.
XX
CC   This invention describes a novel method of predicting the risk, and/or
CC   for diagnosis, of carcinoma and inflammatory bowel disease (IBD)
CC   associated with a genetic predisposition. The method comprises testing a
CC   subject's DNA for the presence of a polymorphic UGT1A7 allele (UGT =
CC   uridine diphosphate-5'-glucuronosyl transferase) that contains mutations
CC   in codons 11, 129, 131 and/or 208. Polymorphic UGT1A7*2, UGT1A7*3 or
CC   UGT1A7*4 genes are used for preparing the corresponding UGT isoforms for
CC   metabolic characterisation of antitumour therapeutics and for examining
CC   toxicity/carcinogenicity of potential UGT1A7 substrates. The products of
CC   the invention have cytostatic and antiinflammatory activity and are
CC   appropriate for gene therapy. The method of the invention is used for
CC   diagnosis, or assessing risk, of carcinoma, especially of the colon,
CC   pancreas, liver, stomach or oesophagus, and IBD. The method allows early
CC   identification of subjects at risk. This sequence represents a primer
CC   used in the identification of the UGT1A7 polymorphism at codon 11 of the
CC   wild-type UGT1A7 gene
XX
SQ   Sequence 21 BP; 2 A; 7 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        938 GTGGCCTGGCCTACTGCCA 956
              |||| ||||||| || |||
Db          3 GTGGACTGGCCTCCTTCCA 21


RESULT 1206
ABX04548/c
ID   ABX04548 standard; DNA; 21 BP.
XX
AC   ABX04548;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Mouse adipose complement related protein zsig37 primer ZC18687.
XX
KW   Mouse; ss; primer; adipocyte complement related protein; zsig37;
KW   chromosome 17q25.2; blood flow; vulnerary; antibacterial; vasotropic;
KW   anticoagulant; immunosuppressive; damaged collagenous tissue;
KW   complement activation; thrombosis; trauma; ischaemia; reperfusion;
KW   intestinal strangulation; cardiopulmonary bypass ischaemia;
KW   myocardial infarction; post-trauma vasospasm; stroke;
KW   percutaneous transluminal angioplasty; endarterectomy;
KW   accidental vascular trauma; surgical-induced vascular trauma;
KW   haemostasis; wound healing; antimicrobial.
XX
OS   Mus musculus.
XX
PN   US6448221-B1.
XX
PD   10-SEP-2002.
XX
PF   17-FEB-2000; 2000US-00506855.
XX
PR   19-FEB-1999;   99US-00253604.
PR   22-NOV-1999;   99US-00444794.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Sheppard PO,  Lasser GW,  Bishop PD;
XX
DR   WPI; 2003-038245/03.
XX
PT   Promoting blood flow within the vasculature of a mammal, comprises
PT   administering a pharmaceutical formulation comprising zsig37 proteins.
XX
PS   Example 9; Col 53; 39pp; English.
XX
CC   The invention relates to promoting blood flow within the vasculature of a
CC   mammal, comprises administering to the mammal an amount of a
CC   pharmaceutical formulation that comprises an adipocyte complement related
CC   protein, zsig37, having residues 26-281 of a sequence appearing as
CC   ABG99070. Also included is a method of pacifying damaged collagenous
CC   tissues within a mammal, comprising administering to the mammal an amount
CC   of the pharmaceutical formulation cited above, which achieves
CC   pacification of the damaged collagenous tissues by inhibiting complement
CC   activation or by reducing thrombosis formation. The method is useful in
CC   promoting blood flow within the vasculature of a mammal by reducing
CC   thrombogenic and complement activity, and in pacifying damaged
CC   collagenous surfaces (e.g. in trauma, ischaemia, reperfusion, intestinal
CC   strangulation, cardiopulmonary bypass ischaemia, myocardial infarction,
CC   post-trauma vasospasm, stroke, percutaneous transluminal angioplasty,
CC   endarterectomy, accidental vascular trauma or surgical- induced vascular
CC   trauma). The zsig37 polypeptide, polynucleotide, and an anti-zsig37
CC   antibody are useful as inhibitors of haemostasis and immune function, in
CC   modulating wound healing, and for antimicrobial applications. The human
CC   gene for zsig37 is located on chromosome 17q25.2. The present sequence is
CC   a primer used to sequence cDNA encoding mouse zsig37
XX
SQ   Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        822 GAAGTCCCTCACCCTTGTC 840
              |||||||||| | | ||||
Db         21 GAAGTCCCTCTCACGTGTC 3


RESULT 1207
ACD26013/c
ID   ACD26013 standard; DNA; 21 BP.
XX
```

```
AC   ACD26013;
XX
DT   01-SEP-2003  (first entry)
XX
DE   Human Folate receptor alpha antisense oligonucleotide #8.
XX
KW   Human; ss; antisense; folate receptor alpha; cytostatic; gene therapy;
KW   ribozyme; ovarian cancer; cervical cancer; uterine cancer; brain cancer.
XX
OS   Homo sapiens.
XX
PN   US2003050267-A1.
XX
PD   13-MAR-2003.
XX
PF   11-MAR-2002; 2002US-00093523.
XX
PR   09-MAR-2001; 2001US-0274249P.
XX
PA   (JHAV/) JHAVERI M S.
PA   (ELWO/) ELWOOD P C.
PA   (CHUN/) CHUNG K.
XX
PI   Jhaveri MS,  Elwood PC,  Chung K;
XX
DR   WPI; 2003-503577/47.
XX
PT   New antisense oligonucleotide, useful for preparing a composition for
PT   treating cancer.
XX
PS   Example 10; Page 10; 23pp; English.
XX
CC   The invention relates to an antisense oligonucleotide complementary to a
CC   region of the open reading frame of human folate receptor alpha
CC   comprising a 774-bp sequence. Also included are inhibiting growth of
CC   cancer cells susceptible to growth inhibition, a ribozyme containing the
CC   antisense oligonucleotide and a vector comprising the antisense
CC   oligonucleotide. The antisense oligonucleotide is useful for preparing a
CC   composition for treating cancer of the ovary, cervix, uterus and brain.
CC   The present sequence is an antisense oligonucleotide targeting the human
CC   folate receptor alpha cDNA
XX
SQ   Sequence 21 BP; 2 A; 8 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1076 ACTCCAATGAGGTGGTGAC 1094
              || |||||||||  |||| |
Db         20 ACCCCAATGAGGAGGTGGC 2


RESULT 1208
ACD25911
ID   ACD25911 standard; DNA; 21 BP.
XX
AC   ACD25911;
XX
DT   29-AUG-2003  (first entry)
XX
DE   Mouse tryptase-like polypeptide Ztryp-1 related PCR primer #2.
XX
KW   Mouse; tryptase-like protein; ztryp-1; cardiovascular; cardiant;
KW   antiinflammatory; antiarthritic; antiinfertility; contraceptive;
KW   protein therapy; contractile tissue dysfunction; cardiovascular disease;
KW   inflammatory actions in heart; inflammatory bowel disease; arthritis;
KW   infertility; impotence; male reproductive dysfunction; birth control;
KW   in vitro fertilisation; birth; PCR; primer; ss.
XX
OS   Mus musculus.
XX
PN   US6514741-B1.
XX
PD   04-FEB-2003.
XX
PF   09-AUG-2000; 2000US-00636382.
XX
PR   18-AUG-1999;   99US-0149563P.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Presnell SR,  Taft DW;
XX
DR   WPI; 2003-491701/46.
XX
PT   New tryptase-like polypeptides (ZTRYP1), useful for treating a
PT   dysfunction associated with contractile tissues (e.g. heart), for
PT   modulating contractility, or for treating e.g. cardiovascular disease,
PT   arthritis or infertility.
XX
PS   Example 1; Col 63-64; 40pp; English.
XX
CC   The invention decsribes a new polypeptide (ZTRYP1) having a sequence
CC   comprising amino acid residues 44 (Val) - 276 (Ile), 24 (Leu) - 276
CC   (Ile), 44 (Val) - 314 (Leu), 24 (Leu) - 314 (Leu), or 1 (Met) - 314
CC   (Leu), of a 314-amino acid Mus musculus sequence (mmP); 43 (Val) - 275
CC   (Arg), 19 (Arg) - 275 (Arg), 43 (Val) - 312 (Leu), 19 (Arg) - 312 (Leu),
CC   or 1 (Met) - 312 (Leu) of a 312-amino acid Homo sapiens sequence (hsP) or
CC   of a 233 fusion polypeptide sequence. The ZTRYP1 polypeptide is useful
CC   for treating a dysfunction associated with contractile tissues (e.g.
CC   lung, gastrointestinal, heart, vas deferens or prostate tissues), and may
CC   be used for suppressing or enhancing contractility in vivo. In
CC   particular, the ZTRYP1 polypeptide is useful for treating or diagnosing
CC   cardiovascular disease (e.g. inflammatory actions in heart), inflammatory
CC   bowel disease, arthritis, infertility, impotence or other male
CC   reproductive dysfunction. The polypeptide is also useful in birth
CC   control, in vitro fertilisation, or inducing birth. This sequence
CC   represents a primer used to identify mouse tryptase-like protein Ztryp-1
XX
SQ   Sequence 21 BP; 1 A; 9 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1195 GGCCGTCCCCTCTTTCCGG 1213
              ||| ||||||| |||| |
Db          2 GGCTGTCCCCTCCTTCCTG 20


RESULT 1209
ADC01969/c
ID   ADC01969 standard; DNA; 21 BP.
XX
AC   ADC01969;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Human zsig37 cDNA sequencing primer #26.
XX
KW   Human; zsig37; ss; chromosome 17q25.2; vascular occlusion; vasodilation;
KW   adipocyte complement related protein; vascular injury;
KW   vascular reconstruction; trauma; stroke; aneurysm; plaque rupture;
KW   vasculature; diabetes; atherosclerosis; blood flow; vasorelaxant;
KW   tranquiliser; vulnerary; cerebroprotective; antiatherosclerotic;
KW   sequencing; primer.
XX
OS   Homo sapiens.
XX
PN   US6544946-B1.
XX
PD   08-APR-2003.
XX
PF   19-JUL-2000; 2000US-00619740.
XX
```

PR 19-FEB-1999; 99US-00253604.
PR 22-NOV-1999; 99US-00444794.
PR 17-FEB-2000; 2000US-00506855.
XX
PA (ZYMO) ZYMOGENETICS INC.
XX
PI Sheppard PO, Lasser GW, Bishop PD;
XX
DR WPI; 2003-707011/67.
XX
PT Minimizing vascular occlusion or inducing vasodilation within the
PT vasculature of a mammal, by administering an adipocyte complement related
PT protein, zsig37 that promotes blood flow.
XX
PS Example 9; SEQ ID NO 41; 44pp; English.
XX
CC The invention relates to a method for minimising vascular occlusion or
CC inducing vasodilation within a mammal, involving administering a
CC formulation comprising an adipocyte complement related protein, zsig37.
CC The method is useful for minimising vascular occlusion and inducing
CC vasodilation in a mammal suffering from acute vascular injury which may
CC be due to vascular reconstruction, trauma, stroke or aneurysm. The
CC vascular injury is due to plaque rupture, degradation of the vasculature,
CC complications associated with diabetes and atherosclerosis.
CC Administration of the formulation promotes blood flow or elicits a
CC vasorelaxant response. This sequence represents a primer used to sequence
CC cDNA encoding the human zsig37 polypeptide of the invention.
XX
SQ Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 822 GAAGTCCCTCACCCTTGTC 840
||||||||| | | ||||
Db 21 GAAGTCCCTCTCACGTGTC 3

RESULT 1210
ADC17380
ID ADC17380 standard; DNA; 21 BP.
XX
AC ADC17380;
XX
DT 18-DEC-2003 (first entry)
XX
DE Mouse serine protease ztrypl primer seq id 5.
XX
KW cardiant; antiinflammatory; antiasthmatic; antiarthritic;
KW antiinfertility; contraceptive; serine protease; cancer; immune disorder;
KW Ztrypl; inflammatory disorder; reproductive disorder; infertility;
KW contraceptive; testicular disorder; heart disorder; asthma; arthritis;
KW mouse; PCR; primer; ss.
XX
OS Mus sp.
XX
PN US2003119035-A1.
XX
PD 26-JUN-2003.
XX
PF 01-OCT-2002; 2002US-00261845.
XX
PR 09-AUG-2000; 2000US-00636382.
XX
PA (ZYMO) ZYMOGENETICS INC.
XX
PI Presnell SR, Taft DW;
XX
DR WPI; 2003-645495/61.
XX
PT New ztrypl gene, useful in diagnosing diseases associated with the ztrypl
PT gene, e.g., cancer or immune disorders.
XX
PS Example 1; SEQ ID NO 5; 44pp; English.
XX
CC The invention describes a new isolated polynucleotide encoding a serine
CC protease polypeptide comprising a sequence of amino acid residues that is
CC 90% identical to a sequence comprising: amino acid residues 44-276, 24-
CC 276, 44-314, 24-314 or 1-314 of the 314-amino acid sequence or amino acid
CC residues 43-275, 19-275, 43-312, 19-312 or 1-312 of the 312-amino acid
CC sequence; or 233 amino acids. The polynucleotide is useful in diagnosing
CC diseases associated with the ztrypl gene, e.g., cancer or immune
CC disorders. Ztrypl proteins are useful for treating inflammatory,
CC reproductive (e.g. infertility and contraceptive), testicular and heart
CC disorders. They are also useful for treating asthma and arthritis. This
CC sequence represents a primer used in the isolation and analysis of mouse
CC serine protease ztrypl.
XX
SQ Sequence 21 BP; 1 A; 9 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1195 GGCCGTCCCCTCTTTCCGG 1213
||| |||||||| |||| |
Db 2 GGCTGTCCCCTCCTTCCTG 20

RESULT 1211
AAD59914/c
ID AAD59914 standard; DNA; 21 BP.
XX
AC AAD59914;
XX
DT 18-DEC-2003 (first entry)
XX
DE ZC18687 oligo used to identify mouse zisg37 DNA.
XX
KW Adipocyte complement related protein; collagenous surface pacification;
KW wound healing; tumour metastasis; gene therapy; thrombogenic; mouse;
KW Acrp; zsig37; ss.
XX
OS Mus musculus.
XX
PN US2003144208-A1.
XX
PD 31-JUL-2003.
XX
PF 07-FEB-2003; 2003US-00360186.
XX
PR 19-FEB-1999; 99US-00253604.
PR 22-NOV-1999; 99US-00444794.
PR 17-FEB-2000; 2000US-00506855.
PR 19-JUL-2000; 2000US-00619740.
XX
PA (SHEP/) SHEPPARD P O.
PA (LASS/) LASSER G W.
PA (BISH/) BISHOP P D.
XX
PI Sheppard PO, Lasser GW, Bishop PD;
XX
DR WPI; 2003-755532/71.
XX
PT Promoting blood flow within the vasculature of a mammal, comprising
PT administering an adipocyte complement related protein to reduce
PT thrombogenic and complement activity within the vasculature.
XX
PS Example 9; Page 29; 48pp; English.
XX
CC The invention relates to a method of promoting blood flow within the
CC vasculature of a mammal. The method involves administering an adipocyte
CC complement related protein (Acrp) to the mammal to reduce and complement
CC activity within the vasculature. Methods and compositions of the
CC invention are useful in promoting blood flow within the vasculature of a

```
CC   mammal, in pacifying collagenous surfaces, in modulating wound healing or
CC   mediating tumour metastasis. The invention is also useful in gene
CC   therapy. The present sequence is an oligo used to identify mouse
CC   adipocyte complement related protein homologue (zsig37) DNA
XX
SQ   Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        822 GAAGTCCCTCACCCTTGTC 840
              ||||||||||  | | ||||
Db         21 GAAGTCCCTCTCACGTGTC 3


RESULT 1212
ADD14411/c
ID   ADD14411 standard; DNA; 21 BP.
XX
AC   ADD14411;
XX
DT   01-JAN-2004  (first entry)
XX
DE   Human src biomarker reverse PCR primer SEQ ID NO:600.
XX
KW   predictor set; protein tyrosine kinase activity modulator;
KW   protein tyrosine kinase pathway; protein tyrosine kinase; cytostatic;
KW   gene therapy; drug sensitivity; genetic profile; cancer; human;
KW   PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO2003062395-A2.
XX
PD   31-JUL-2003.
XX
PF   17-JAN-2003; 2003WO-US001981.
XX
PR   18-JAN-2002; 2002US-0350061P.
XX
PA   (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX
PI   Huang F,  Fairchild CR,  Lee FY,  Shaw P;
XX
DR   WPI; 2003-636735/60.
XX
PT   New polynucleotides and polypeptides for predicting the activity of
PT   compounds that interact with protein tyrosine kinases and/or protein
PT   tyrosine kinase pathways.
XX
PS   Example 2; SEQ ID NO 600; 139pp; English.
XX
CC   The present invention describes a predictor set comprising a plurality of
CC   polynucleotides or polypeptides whose expression pattern is predictive of
CC   the response of cells to treatment with a compound that modulates protein
CC   tyrosine kinase activity or members of the protein tyrosine kinase
CC   pathway. Also described: (1) predicting whether a compound is capable of
CC   modulating the activity of cells, comprising obtaining a sample of cells,
CC   determining whether the cells express a plurality of markers, and
CC   correlating the expression of the markers to the compound's ability to
CC   modulate the activity of the cells; (2) a plurality of cell lines for
CC   identifying polynucleotides and polypeptides whose expression levels
CC   correlate with compound sensitivity or resistance of cells associated
CC   with a disease state; and (3) identifying polynucleotides and
CC   polypeptides that predict compound sensitivity or resistance of cells
CC   associated with a disease state, comprising subjecting the plurality of
CC   cell lines to one or more compounds, analysing the expression pattern of
CC   a microarray of polynucleotides or polypeptides, and selecting
CC   polynucleotides or polypeptides that predict the sensitivity or
CC   resistance of cells associated with a disease state by using the
CC   expression pattern of the microarray. The polynucleotides and
CC   polypeptides have cytostatic activities, and can be used in gene therapy.
CC   The polynucleotides and polypeptides are useful in predicting the
CC   activity of compounds that interact with protein tyrosine kinases and/or
CC   protein tyrosine kinase pathways. These may be used in determining drug
CC   sensitivity in patients to allow the development of individualized
CC   genetic profiles which aid in treating diseases and disorders (e.g.
CC   cancer) based on patient response at a molecular level. The present
CC   sequence is used in the exemplification of the present invention.
XX
SQ   Sequence 21 BP; 2 A; 8 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy         18 ATGGACAGGAATGCAGAGG 36
              |||||  ||  |  ||||||||
Db         19 ATGGAGAGAACTGCAGAGG 1


RESULT 1213
ADC84418/c
ID   ADC84418 standard; DNA; 21 BP.
XX
AC   ADC84418;
XX
DT   01-JAN-2004  (first entry)
XX
DE   HPV detection method-related oligonucleotide Gap21-3.
XX
KW   probe; human papilloma virus; HPV; detection; identification; ss;
KW   Gap21-3.
XX
OS   Unidentified.
XX
PN   EP1302550-A1.
XX
PD   16-APR-2003.
XX
PF   10-OCT-2001; 2001EP-00123379.
XX
PR   10-OCT-2001; 2001EP-00123379.
XX
PA   (KING-) KING CAR FOOD IND CO LTD.
XX
PI   Lin C,  Lin R,  You C,  Huang H,  Lee B,  Lee H,  Lin Y,  Fan C;
PI   Hsu H,  Shih C,  Yeh C,  Kao Y,  Pan C,  Chan P;
XX
DR   WPI; 2003-432398/41.
XX
PT   Detector for identifying human papilloma virus subtypes, comprises
PT   carrier having two parts carrying first and second oligonucleotides that
PT   respectively hybridize with DNA contained in first and second subtypes of
PT   the virus.
XX
PS   Disclosure; SEQ ID NO 648; 221pp; English.
XX
CC   The invention comprises oligonucleotides for detecting and identifying
CC   subtypes of human papilloma virus (HPV) contained in a sample. The
CC   oligonucleotides of the invention are useful for simultaneously detecting
CC   and identifying subtypes of HPVs. The present DNA sequence represents an
CC   oligonucleotide that was used in the exemplification of the invention.
XX
SQ   Sequence 21 BP; 5 A; 9 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1156 ATGTGGGGTGTGGGCTGCA 1174
              ||||||| ||  ||||||
Db         19 ATGTGGGGAGTACGCTGCA 1
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```
RESULT 1214
ADF44292/c
ID   ADF44292 standard; DNA; 21 BP.
XX
AC   ADF44292;
XX
DT   12-FEB-2004  (first entry)
XX
DE   HPV PCR primer GAP 21-3.
XX
KW   detection; human papillomavirus; HPV subtype; PCR; primer; ss.
XX
OS   Human papillomavirus.
XX
PN   JP2002360271-A.
XX
PD   17-DEC-2002.
XX
PF   28-NOV-2001; 2001JP-00362595.
XX
PR   04-MAY-2001; 2001TW-00110785.
XX
PA   (KING-) KING CAR FOOD IND CO LTD.
XX
DR   WPI; 2003-600935/57.
XX
PT   A detecting apparatus and a detecting method for identifying the subtypes
PT   of many species of human papilloma viruses at the same time and a
PT   composition for the detection.
XX
PS   Example 2.1.1; SEQ ID NO 649; 166pp; Japanese.
XX
CC   This invention describes a novel detecting apparatus for identifying the
CC   subtypes of human papillomaviruses (HPV) contained in a sample which
CC   comprises a carrier which can load sample, a first oligonucleotide loaded
CC   on first part of the carrier and a second oligonucleotide loaded on
CC   second part of carrier, in which first and second oligonucleotides
CC   hybridise with the DNA of the first and the second HPV subtype and can
CC   identify HPV subtype contained in sample at the same time. This sequence
CC   represents a PCR primer used in the method of the invention.
XX
SQ   Sequence 21 BP; 5 A; 9 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1156 ATGTGGGGTGTGGGCTGCA 1174
              ||||||||  ||  ||||||
Db         19 ATGTGGGGAGTACGCTGCA 1

RESULT 1215
ADF18039/c
ID   ADF18039 standard; DNA; 21 BP.
XX
AC   ADF18039;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Mouse zsig37 sequencing primer #10.
XX
KW   blood flow; adipocyte complement related protein; thrombogenic activity;
KW   complement activity; vasculature; cardiopulmonary bypass ischaemia;
KW   resuscitation; myocardial infarction; post-trauma vasospasm; stroke;
KW   percutaneous transluminal angioplasty; endarterectomy;
KW   accidental vascular trauma; surgical-induced vascular trauma;
KW   thrombosis formation; mouse; zsig37; ss; primer; sequencing.
XX
OS   Mus musculus.
XX
PN   US2003078206-A1.
XX
PD   24-APR-2003.
XX
PF   10-SEP-2002; 2002US-00241258.
XX
PR   19-FEB-1999;   99US-00253604.
PR   22-NOV-1999;   99US-00444794.
PR   17-FEB-2000; 2000US-00506855.
PR   17-JUL-2002; 2002US-00198695.
XX
PA   (SHEP/) SHEPPARD P D.
PA   (LASS/) LASSER G W.
PA   (BISH/) BISHOP P D.
XX
PI   Sheppard PD,  Lasser GW,  Bishop PD;
XX
DR   WPI; 2003-616010/58.
XX
PT   Promoting blood flow within the vasculature of mammals using an adipocyte
PT   complement related protein, useful for diagnosing and treating
PT   cardiopulmonary bypass ischemia, myocardial infarction, stroke and/or
PT   vascular trauma.
XX
PS   Example 9; SEQ ID NO 41; 43pp; English.
XX
CC   The invention relates to a method of promoting blood flow within the
CC   vasculature of a mammal comprises administering an adipocyte complement
CC   related protein in a vehicle, where the adipocyte complement related
CC   protein reduces thrombogenic and complement activity within the
CC   vasculature. The methods and compositions of the present invention are
CC   useful for diagnosing and treating damaged collagenous tissues, such as
CC   cardiopulmonary bypass ischaemia and resuscitation, myocardial infarction
CC   or post-trauma vasospasm including stroke, percutaneous transluminal
CC   angioplasty, endarterectomy, accidental vascular trauma or surgical-
CC   induced vascular trauma. They can also be used in reducing thrombosis
CC   formation within the vasculature of a mammal. The present sequence is
CC   used in the exemplification of the invention.
XX
SQ   Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        822 GAAGTCCCTCACCCTTGTC 840
              ||||||||||  |  |  ||||
Db         21 GAAGTCCCTCTCACGTGTC 3

RESULT 1216
ADJ37408
ID   ADJ37408 standard; DNA; 21 BP.
XX
AC   ADJ37408;
XX
DT   22-APR-2004  (first entry)
XX
DE   Tumour therapy associated PRO4316 primer seq id 127.
XX
KW   cytostatic; gene therapy; PRO; PRO197; PRO207; PRO226; PRO232; PRO243;
KW   PRO256; PRO269; PRO274; PRO304; PRO339; PRO1558; PRO779; PRO1185;
KW   PRO1245; PRO1759; PRO5775; PRO7133; PRO7168; PRO5725; PRO202; PRO206;
KW   PRO264; PRO313; PRO342; PRO542; PRO773; PRO861; PRO1216; PRO1686;
KW   PRO1800; PRO3562; PRO9850; PRO539; PRO4316; PRO4980; cancer; tumour;
KW   neoplastic cell growth; neoplastic cell proliferation; carcinoma;
KW   lymphoma; blastoma; sarcoma; leukaemia; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2003211096-A1.
XX
PD   13-NOV-2003.
XX
```

PF 02-AUG-2002; 2002US-00211858.
XX
PR 31-AUG-1999; 99US-0151689P.
PR 11-FEB-2000; 2000WO-US003565.
PR 09-AUG-2001; 2001US-00927796.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Goddard A, Godowski PJ, Gurney AL, Hillan KJ;
PI Marsters SA, Pan J, Pitti RM, Roy MA, Smith V, Stone DM;
PI Watanabe CK, Wood WI;
XX
DR WPI; 2003-901564/82.
XX
PT New isolated PRO polypeptides, useful as targets for the diagnosis,
PT prevention and treatment of cancers, e.g. lymphoma, blastoma, sarcoma or
PT leukemia, and as predictors of the prognosis of tumor treatment.
XX
PS Example 24; SEQ ID NO 127; 307pp; English.
XX
CC The invention describes an isolated PRO polypeptide. The PRO polypeptide:
CC has at least 80% amino acid sequence identity to: (1) any one of 35 fully
CC defined sequences of 104-954 amino acids (designated P1-P35) given in the
CC specification, with or without its associated signal peptide; (2) an
CC extracellular domain of any one of the polypeptides of P1-P35, with or
CC without its associated signal peptide; or (3) an amino acid sequence
CC encoded by the full-length coding sequence of the DNA deposited under
CC ATCC accession number 209284, 209358, 203376, 209250, 209508, 209379,
CC 209397, 209786, 209482, 209490, 203312, 55820, 203096, 203155, 203465,
CC PTA-255, PTA-618, PTA-545, PTA-256, 203538, 203661, 203835 or PTA-43; or
CC scores at least 80% positives when compared to any one of the sequences
CC of P1-P35. Specifically claimed are 35 PRO polypeptides, i.e. PRO197,
CC PRO207, PRO226, PRO232, PRO243, PRO256, PRO269, PRO274, PRO304, PRO339,
CC PRO1558, PRO779, PRO1185, PRO1245, PRO1759, PRO5775, PRO7133, PRO7168,
CC PRO5725, PRO202, PRO206, PRO264, PRO313, PRO342, PRO542, PRO773, PRO861,
CC PRO1216, PRO1686, PRO1800, PRO3562, PRO9850, PRO539, PRO4316 and PRO4980
CC polypeptides. The PRO polypeptides are useful as targets for the
CC diagnosis, prevention and treatment of cancers, and as predictors of the
CC prognosis of tumour treatment. The nucleic acid molecules, antibodies and
CC antagonists are useful for diagnosing and treating neoplastic cell growth
CC and proliferation, e.g. carcinoma, lymphoma, blastoma, sarcoma or
CC leukaemia. The antibodies may be used in screening assays for drug
CC candidates. This sequence represents a primer used in the isolation of
CC DNA encoding a PRO protein useful in the treatment of cancers.
XX
SQ Sequence 21 BP; 6 A; 5 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 507 GGGCTACCTGGAGAAGCTG 525
|| | ||| ||||||||||
Db 2 GGACGACCAGGAGAAGCTG 20

RESULT 1217
ABX99015/c
ID ABX99015 standard; DNA; 21 BP.
XX
AC ABX99015;
XX
DT 20-MAY-2003 (first entry)
XX
DE Human AAGA SNP analysis PCR primer, #42.
XX
KW Human; PCR; primer; ss; asthma; bronchial hyperresponsiveness;
KW airway obstruction; chronic bronchial inflammation;
KW multifactorial disease; asthma-associated gene; AAGA; allele-specific;
KW single nucleotide polymorphism; SNP; genetic profile; gene therapy;
KW antisense gene therapy; adult distress respiratory syndrome;
KW chronic obstructive pulmonary; chronic bronchitis; dyspnea.
XX
OS Homo sapiens.
XX
PN WO2003008640-A2.
XX
PD 30-JAN-2003.
XX
PF 15-JUL-2002; 2002WO-EP007847.
XX
PR 16-JUL-2001; 2001US-0305649P.
XX
PA (NOVS) NOVARTIS AG.
PA (NOVS) NOVARTIS-ERFINDUNGEN VERW GES MBH.
PA (UYWA-) UNIV WAKE FOREST HEALTH SCI.
PA (UYGR-) RIJKSUNIV GRONINGEN.
XX
PI Whittaker PA, Meyers DA, Postma DS, Bleecker ER;
XX
DR WPI; 2003-239359/23.
XX
PT Determining whether a subject has or is at risk of developing a disease
PT characterized by bronchial hyperresponsiveness, comprises determining the
PT expression or bioactivity level of an asthma-associated gene.
XX
PS Example 3; Page 27; 70pp; English.
XX
CC The invention discloses a method for determining a disease (e.g asthma)
CC characterised by bronchial hyperresponsiveness, or the risk of developing
CC it and airway obstruction or chronic bronchial inflammation. Asthma is a
CC multifactorial disease, so discovery of the asthma susceptibility genes
CC can identify the fundamental mechanisms behind asthma. One such gene is
CC the asthma-associated gene, AAGA. Also disclosed is an allele-specific
CC primer or oligonucleotide probe capable of detecting a polymorphism, an
CC isolated polynucleotide, and encoded polypeptide, which is a variant of
CC AAGA associated with bronchial hyperresponsiveness and methods for
CC pharmacogenomically selecting a therapy to be administered to an
CC individual having asthma, comprising determining an AAGA genetic profile
CC and comparing the individual's genetic profile to an AAGA genetic
CC population profile, monitoring the effectiveness of treatment (e.g. gene
CC therapy or antisense gene therapy) of a subject and identifying a
CC substance which binds to or modulates the activity of AAGA. The
CC polynucleotide, polypeptide encoded by it, antibody to the polypeptide,
CC or an oligonucleotide, is useful for preparing a medicament for treating
CC a disease characterised by bronchial hyperresponsiveness, or inflammatory
CC or obstructive airways diseases, e.g. adult distress respiratory
CC syndrome, chronic obstructive pulmonary, chronic bronchitis or dyspnea.
CC The method is useful for prognosing, diagnosing or confirming that a
CC symptomatic subject has a genetic defect which causes or contributes to
CC the particular disease or disorder, for ascertaining an individual's
CC predilection to develop bronchial responsiveness and for customising a
CC therapy for the individual according to the individual's genetic profile.
CC The sequences presented in ABX98968-ABX99053 and ABX99064-ABX99066 are
CC PCR primers which were used to amplify sequences used in human AAGA
CC vector construction and primers sued to anlayse AAGA single nucleotide
CC polymorphisms (SNPs)
XX
SQ Sequence 21 BP; 3 A; 5 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1380 GGCCGACCTCCTCACCAAG 1398
||| |||| |||||||||
Db 21 GGCTGACCGTCTCACCAAG 3

RESULT 1218
ACD02587/c
ID ACD02587 standard; DNA; 21 BP.
XX
AC ACD02587;
XX
DT 31-JUL-2003 (first entry)

XX
DE Mouse zsig37 orthologue sequencing primer ZC18687.
XX
KW Blood flow; vasodilation; wound repair; platelet inhibition; tumour;
KW vascular occlusion; ischaemic reperfusion injury; microvascular repair;
KW adipocyte complement related protein; intestinal strangulation; trauma;
KW angioplasty; coronary artery bypass graft; endarterectomy; aneurysm;
KW anastomosis; stroke; cardiopulmonary bypass ischaemia; inflammation;
KW myocardial infarction; percutaneous transluminal angioplasty; infection;
KW post-trauma vasospasm; prostatic biomaterial; fibroblast recruitment;
KW wound retraction; mouse; zsig37; primer; ss; sequencing; PCR.
XX
OS Mus musculus.
XX
PN US2003022838-A1.
XX
PD 30-JAN-2003.
XX
PF 25-JUN-2002; 2002US-00180762.
XX
PR 19-FEB-1999; 99US-00253604.
PR 22-NOV-1999; 99US-00444794.
PR 17-FEB-2000; 2000US-00506855.
PR 19-JUL-2000; 2000US-00619740.
XX
PA (SHEP/) SHEPPARD P O.
PA (LASS/) LASSER G W.
PA (BISH/) BISHOP P D.
XX
PI Sheppard PO, Lasser GW, Bishop PD;
XX
DR WPI; 2003-456304/43.
XX
PT Promoting blood flow or inducing vasodilation within vasculature of
PT mammal, or pacifying damaged collagenous tissues or pacifying surface of
PT prostatic biomaterial, by administering adipocyte complement related
PT protein.
XX
PS Example 9; Page 29; 46pp; English.
XX
CC The invention relates to a method of promoting blood flow or inducing
CC vasodilation within the vasculature of a mammal, pacifying damaged
CC collagenous tissues or surface of prostatic biomaterial, mediating wound
CC repair, inhibiting platelet adhesion, activation or accretion, minimising
CC vascular occlusion, protecting ischaemic myocardium from reperfusion
CC injury or mediating tumour metastasis, comprising administering adipocyte
CC complement related protein. The method is useful for promoting blood flow
CC within the vasculature of a mammal, where the mammal suffers from acute
CC vascular injury, where the injury is due to vascular reconstruction which
CC comprises angioplasty, coronary artery bypass graft, endarterectomy,
CC microvascular repair or anastomosis of a vascular graft, or the injury is
CC due to trauma, stroke or aneurysm. The method is useful for pacifying
CC damaged collagenous tissues within a mammal, where the damaged
CC collagenous tissues are due to injury associated with ischaemia and
CC reperfusion. The injury comprises trauma injury, ischaemia, intestinal
CC strangulation, or injury associated with pre- and post-establishment of
CC blood flow. The mammal suffers from cardiopulmonary bypass ischaemia and
CC recesitation, myocardial infarction, or post-trauma vasospasm. The post-
CC trauma vasospasm comprises stroke, percutaneous transluminal angioplasty,
CC endarterectomy, accidental vascular trauma or surgical-induced vascular
CC trauma. The method is useful for pacifying the surface of a prostatic
CC biomaterial for use in association with a mammal, where the surface of
CC the prostatic biomaterial is coated with collagen or collagen fragments,
CC gelatin, fibrin or fibronectin. The method is useful for mediating wound
CC repair within a mammal, where the method enhances progression in wound
CC healing and progression in wound healing comprises reduction in
CC inflammation, reduction in fibroblast recruitment, wound retraction, or
CC reduction in infection. The method is useful for inhibiting platelet
CC adhesion, activation or accretion. The method is useful for minimising
CC vascular occlusion by increasing patency time in a patient in need of the
CC treatment. The method is useful for inducing vasodilation within the
CC vasculature of a mammal. The method is useful for protecting ischaemic
CC myocardium from reperfusion injury. The method is useful for mediating
CC tumour metastasis. The present sequence represents the mouse adipocyte
CC complement related protein zsig27 DNA orthologue sequencing primer
XX
SQ Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 822 GAAGTCCCTCACCCTTGTC 840
||||||||||| | | ||||
Db 21 GAAGTCCCTCTCACGTGTC 3

RESULT 1219
ADM47388/c
ID ADM47388 standard; DNA; 21 BP.
XX
AC ADM47388;
XX
DT 03-JUN-2004 (first entry)
XX
DE NOVX oligonucleotide probe, SEQ ID No 221.
XX
KW NOVX; cytostatic; gene therapy; vaccine; cancer; chromosome mapping;
KW probe; ss.
XX
OS Unidentified.
XX
PN WO2003083039-A2.
XX
PD 09-OCT-2003.
XX
PF 03-JUL-2002; 2002WO-US021485.
XX
PR 05-JUL-2001; 2001US-0303046P.
PR 09-JUL-2001; 2001US-0303828P.
PR 11-JUL-2001; 2001US-0304502P.
PR 12-JUL-2001; 2001US-0305011P.
PR 13-JUL-2001; 2001US-0305262P.
PR 16-JUL-2001; 2001US-0305673P.
PR 17-JUL-2001; 2001US-0306085P.
PR 24-JUL-2001; 2001US-0307536P.
PR 27-JUL-2001; 2001US-0308228P.
PR 30-JUL-2001; 2001US-0308877P.
PR 14-AUG-2001; 2001US-0312203P.
PR 17-SEP-2001; 2001US-0322640P.
PR 19-SEP-2001; 2001US-0323484P.
PR 21-SEP-2001; 2001US-0323821P.
PR 21-SEP-2001; 2001US-0323948P.
PR 25-SEP-2001; 2001US-0324711P.
PR 09-OCT-2001; 2001US-0327893P.
PR 21-NOV-2001; 2001US-0331768P.
PR 21-FEB-2002; 2002US-0359191P.
PR 22-FEB-2002; 2002US-0358939P.
PR 28-FEB-2002; 2002US-0360923P.
PR 01-MAR-2002; 2002US-0360830P.
PR 01-MAR-2002; 2002US-0361178P.
PR 05-MAR-2002; 2002US-0361748P.
PR 12-MAR-2002; 2002US-0363429P.
PR 12-MAR-2002; 2002US-0363683P.
PR 12-APR-2002; 2002US-0372141P.
PR 16-APR-2002; 2002US-0372967P.
PR 16-APR-2002; 2002US-0373051P.
PR 16-APR-2002; 2002US-0373063P.
PR 17-APR-2002; 2002US-0373280P.
PR 17-APR-2002; 2002US-0373287P.
PR 19-APR-2002; 2002US-0373881P.
PR 02-JUL-2002; 2002US-00187975.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Li L, Shenoy SG, Patturajan M, Ellerman K, Gorman L, Zhong M;

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PI   Catterton E,  Spytek KA,  Miller CE,  Edinger SR,  Hjalt T,  Gerlach VL;
PI   Shimkets RA,  Taupier RJ,  Anderson DW,  Guo X,  Baumgartner JC;
PI   Padigaru M,  Peyman JA,  Smithson G,  Casman SJ,  Voss EZ,  Boldog FL;
PI   Pena CEA,  Chapoval A,  Rastelli L,  Kekuda R,  Vernet CAM;
XX
DR   WPI; 2003-812538/76.
XX
PT   New NOVX polypeptide, useful for preparing a composition for treating or
PT   preventing e.g. cancer or for chromosome mapping.
XX
PS   Example C; SEQ ID NO 221; 433pp; English.
XX
CC   The invention relates to a novel isolated polypeptide, designated NOVX.
CC   The novel polypeptide comprises a sequence comprising 109-1671 amino
CC   acids, or its mature form; a sequence that is at least 95% identical to
CC   the 109-1671 amino acid polypeptide; or a sequence comprising one or more
CC   conservative substitutions in the 109-1671 amino acid polypeptide. The
CC   invention further comprises: a composition; a kit comprising the
CC   composition; a method for determining the presence or amount of the
CC   polypeptide or nucleic acid molecule in a sample; determining the
CC   presence of, or predisposition to, a disease associated with the altered
CC   levels of nucleic acid or of expression of the polypeptide in a first
CC   mammalian subject; identification of an agent that binds to the
CC   polypeptide; identification of a potential therapeutic agent for treating
CC   a pathology related to aberrant expression or physiological interactions
CC   of the polypeptide; a method of screening for a modulator of activity or
CC   latency of, or predisposition to, a pathology associated with the
CC   polypeptide; a method for modulating the activity of the polypeptide;
CC   treating or preventing a pathology associated with the polypeptide;
CC   treating a pathological state in a mammal; an isolated nucleic acid
CC   molecule; a vector comprising the nucleic acid molecule; a cell
CC   comprising the vector; an antibody that immunospecifically binds to the
CC   polypeptide; and a method for producing the polypeptide. The NOVX
CC   polypeptide and its encoding nucleic acid have cytostatic activity. The
CC   NOVX polynucleotide can be used in gene therapy to treat disorders. The
CC   NOVX polypeptide can be used to create a vaccine. The polypeptide is
CC   useful for preparing a composition for treating or preventing a
CC   pathological state in a mammal, e.g., cancer, or for chromosome mapping.
CC   This polynucleotide sequence represents a probe used in the
CC   exemplification of the invention.
XX
SQ   Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        350 TGGGGTCTGATGGGGAGAG 368
              ||||| || || |||||||
Db         19 TGGGGGCTTATAGGGAGAG 1


RESULT 1220
ADG68332
ID   ADG68332 standard; DNA; 21 BP.
XX
AC   ADG68332;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human PRO polypeptide PCR primer #35.
XX
KW   neoplastic tumour; lung; colon; breast; prostate; rectal; cervical;
KW   liver; gene therapy; Human; ss; primer; PCR.
XX
OS   Homo sapiens.
XX
PN   US2003170228-A1.
XX
PD   11-SEP-2003.
XX
PF   02-AUG-2002; 2002US-00210951.
XX
PR   31-AUG-1999;  99US-0151689P.
PR   11-FEB-2000; 2000WO-US003565.
PR   09-AUG-2001; 2001US-00927796.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Goddard A,  Godowski PJ,  Gurney AL,  Hillan KJ;
PI   Marsters SA,  Pan J,  Pitti RM,  Roy MA,  Smith V,  Stone DM;
PI   Watanabe CK,  Wood WI;
XX
DR   WPI; 2004-020650/02.
XX
PT   New isolated antibodies binding PRO polypeptides, useful for diagnosing,
PT   prognosticating and/or treating neoplastic tumors, such as lung, colon,
PT   breast, prostate, rectal, cervical and liver tumors.
XX
PS   Example 24; SEQ ID NO 127; 308pp; English.
XX
CC   The invention relates to an isolated antibody that binds to a PRO
CC   polypeptide. The methods and compositions of the present invention are
CC   useful for diagnosing, prognosticating and/or treating neoplastic
CC   tumours, such as lung, colon, breast, prostate, rectal, cervical and
CC   liver tumours. The PRO polypeptides are also useful as molecular weight
CC   markers, or for chromosome identification. The PRO genes are useful as
CC   hybridisation probes, or for screening libraries of Human cDNA, genomic
CC   DNA or mRNA. The PRO genes may also be used in gene therapy, particularly
CC   for replacing a defective gene. The present sequence is used in the
CC   exemplification of the invention.
XX
SQ   Sequence 21 BP; 6 A; 5 C; 8 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        507 GGGCTACCTGGAGAAGCTG 525
              || | ||| ||||||||||
Db          2 GGACGACCAGGAGAAGCTG 20


RESULT 1221
ADK98272
ID   ADK98272 standard; DNA; 21 BP.
XX
AC   ADK98272;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Primer of the invention #3992.
XX
KW   human; single nucleotide polymorphism; SNP; ss; primer.
XX
OS   Synthetic.
XX
PN   JP2003259875-A.
XX
PD   16-SEP-2003.
XX
PF   08-MAR-2002; 2002JP-00064373.
XX
PR   08-MAR-2002; 2002JP-00064373.
XX
PA   (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR   WPI; 2004-093977/10.
XX
PT   Novel polynucleotide useful for PCR amplification along with two DNA
PT   fragment from another set of sequences, or for detecting single
PT   nucleotide polymorphism in human gene.
XX
PS   Claim 2; SEQ ID NO 7301; 2627pp; Japanese.
XX
CC   The present invention relates to a polynucleotide isolated from a human
```

```
CC   gene and is useful for detecting a single nucleotide polymorphism in a
CC   human gene or for diagnosing of disease. The invention enables the
CC   detection of a single nucleotide polymorphism in a human gene. The
CC   present sequence represents a primer of the invention.
XX
SQ   Sequence 21 BP; 2 A; 7 C; 6 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1692 CCCTGCTTACTCTCTGCCT 1710
              | |||| || |||||||||
Db          2 CACTGCGTAGTCTCTGCCT 20


RESULT 1222
ADK96935/c
ID   ADK96935 standard; DNA; 21 BP.
XX
AC   ADK96935;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Primer of the invention #2655.
XX
KW   human; single nucleotide polymorphism; SNP; ss; primer.
XX
OS   Synthetic.
XX
PN   JP2003259875-A.
XX
PD   16-SEP-2003.
XX
PF   08-MAR-2002; 2002JP-00064373.
XX
PR   08-MAR-2002; 2002JP-00064373.
XX
PA   (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR   WPI; 2004-093977/10.
XX
PT   Novel polynucleotide useful for PCR amplification along with two DNA
PT   fragment from another set of sequences, or for detecting single
PT   nucleotide polymorphism in human gene.
XX
PS   Claim 2; SEQ ID NO 5964; 2627pp; Japanese.
XX
CC   The present invention relates to a polynucleotide isolated from a human
CC   gene and is useful for detecting a single nucleotide polymorphism in a
CC   human gene or for diagnosing of disease. The invention enables the
CC   detection of a single nucleotide polymorphism in a human gene. The
CC   present sequence represents a primer of the invention.
XX
SQ   Sequence 21 BP; 6 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        340 GACTTGAAGATGGGGTCTG 358
              || |||| ||||| |||||
Db         20 GATTTGAGGATGGAGTCTG 2


RESULT 1223
ADJ96243/c
ID   ADJ96243 standard; DNA; 21 BP.
XX
AC   ADJ96243;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Primer ZC18687 used to generate mouse zsig37 DNA.
XX
KW   Haemostasis; immune function; wound repair; infection; zsig37; mouse;
KW   primer; ss.
XX
OS   Mus sp.
XX
PN   US2004014650-A1.
XX
PD   22-JAN-2004.
XX
PF   17-JUL-2002; 2002US-00198695.
XX
PR   17-JUL-2002; 2002US-00198695.
XX
PA   (SHEP/) SHEPPARD P D.
PA   (LASS/) LASSER G W.
PA   (BISH/) BISHOP P D.
XX
PI   Sheppard PD,  Lasser GW,  Bishop PD;
XX
DR   WPI; 2004-132060/13.
XX
PT   Use of adipocyte complement related protein for promoting blood flow
PT   within the vasculature, pacifying damaged collagenous tissues, pacifying
PT   the surface of a prostatic biomaterial or mediating a wound repair within
PT   a mammal.
XX
PS   Example 9; SEQ ID NO 41; 42pp; English.
XX
CC   The present invention relates to polynucleotides and polypeptide
CC   molecules for use asinhibitors in haemostasis and immune function. The
CC   invention is useful promoting blood flow, pacifying damaged collagenous
CC   tissues, pacifying the surface of a prostatic biomaterial and mediating a
CC   wound repair within a mammal. The invention is also useful in preventing
CC   infection at the wound site. The present sequence is a primer used to to
CC   generate mouse zsig37 DNA. The primer is used in the exemplification of
CC   the invention.
XX
SQ   Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14.2;  DB 1;  Length 21;
  Best Local Similarity   84.2%;  Pred. No. 9.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        822 GAAGTCCCTCACCCTTGTC 840
              |||||||||| | | ||||
Db         21 GAAGTCCCTCTCACGTGTC 3


RESULT 1224
ADM94143/c
ID   ADM94143 standard; DNA; 21 BP.
XX
AC   ADM94143;
XX
DT   15-JUL-2004  (first entry)
XX
DE   TCRD gene related Vdelta4 primer.
XX
KW   nucleic acid amplification; primer; PCR; detection;
KW   chromosomal translocation; clonal rearrangement; chromosome aberration;
KW   lymphoproliferative disorder; ss.
XX
OS   Synthetic.
XX
PN   WO2004033728-A2.
XX
PD   22-APR-2004.
XX
PF   13-OCT-2003; 2003WO-NL000690.
XX
PR   11-OCT-2002; 2002US-0417779P.
```

XX
PA (UYRO-) UNIV ROTTERDAM ERASMUS.
PA (DAVI/) DAVI F B L.
XX
PI Van Dongen JJM, Langerak AW, Schuuring EMD, San Miquel JF;
PI Garzia Sanz R, Parreira A, Smith JL, Lavender FL, Morgan GJ;
PI Evans PAS, Kneba M, Hummel M, Macintyre EA, Bastard C;
XX
DR WPI; 2004-364878/34.
XX
PT New set of nucleic amplification primers comprising a forward primer and
PT a reverse primer and capable of amplifying a rearrangement, useful in
PT diagnosing lymphoproliferative disorders.
XX
PS Claim 9; Fig 9B; 121pp; English.
XX
CC The present invention describes a set of nucleic amplification primers
CC capable of amplifying a VH-JH or DH-JH IGH, VK-JK or VK/intron-Kde IGK,
CC Vlambda-Jlambda IGL, Vbeta-Jbeta TCRB or Dbeta-Jbeta TCRB, VY-JY TCRG,
CC Vdelta-Jdelta, Ddelta-Ddelta or Vdelta-Ddelta TCRD rearrangement
CC comprises a forward primer and a reverse primer. Also described: (1) a
CC nucleic acid amplification assay, preferably a PCR or multiplex PCR
CC assay, using the set of primers; (2) detecting VH-JH or DH-JH IGH, VK-JK
CC or VK/intron-Kde IGK, Vlambda-Jlambda IGL, Vbeta-Jbeta TCRB or Dbeta-
CC Jbeta TCRB, VY-JY TCRG, Vdelta-Jdelta, Ddelta-Ddelta or Vdelta-Ddelta
CC TCRD rearrangement; (3) detecting chromosomal translocation (11;14)(BCLg-
CC JGZ-1) or t(14;18)(BCL2-IGH); (4) detecting human TBXAS1, recombination
CC activating protein (RAG1), promyelocytic leukaemia zinc finger protein
CC (PLZF) or AF4 gene; (5) assessing clonal rearrangements and/or chromosome
CC aberrations; and (6) a kit for the detecting at least one rearrangement
CC comprising the set of primers. The new set of nucleic amplification
CC primers capable of amplifying a VH-JH or DH-JH IGH, VK-JK or VK/intron-
CC Kde IGK, Vlambda-Jlambda IGL, Vbeta-Jbeta TCRB or Dbeta-Jbeta TCRB, VY-JY
CC TCRG, Vdelta-Jdelta, Ddelta-Ddelta or Vdelta-Ddelta TCRD rearrangement
CC are useful in diagnosing lymphoproliferative disorders. The present
CC sequence is used in an example from the present invention.
XX
SQ Sequence 21 BP; 10 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1399 CTGTTGCAGTTTGAGGGTC 1417
||||||| |||| ||||
Db 21 CTGTTGCATTTTGCTGGTC 3

RESULT 1225
AAT55032
ID AAT55032 standard; RNA; 15 BP.
XX
AC AAT55032;
XX
DT 25-MAR-2003 (revised)
DT 18-APR-1997 (first entry)
XX
DE Human relA hammerhead ribozyme target sequence (nt. position 630).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW ss.
XX
OS Homo sapiens.
XX
PN WO9523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB000156.
XX
PR 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
PS Claim 2; Page 228; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the
CC nucleotide base position indicated in the DE line. The relA gene product
CC is a subunit of the transcriptional regulator NF-kappaB and is implicated
CC specifically in the induction of inflammatory responses. Regions of the
CC mRNA that do not form secondary folding structures and that contain
CC potential hammerhead and hairpin ribozyme cleavage sites were identified
CC by computer analysis. Ribozymes directed against these mRNA sequences
CC were designed and synthesised with modifications that improve their
CC nuclease resistance. The ribozymes are designed to cleave the target
CC sequences and thereby inhibit relA expression, making them potentially
CC useful for treating rheumatoid arthritis, restenosis and asthma as well
CC as for increasing tolerance to transplanted tissues. The potential
CC immunosuppressive properties of a ribozyme that cleaves relA mRNA means
CC that uses are limited to local delivery, acute indications or ex vivo
CC treatment. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 15 BP; 4 A; 5 C; 1 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 15;
Best Local Similarity 71.4%; Pred. No. 7.4e+02;
Matches 10; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 538 CCCATCTTTGACAA 551
|||| |:::|||||
Db 1 CCCAUCUUUGACAA 14

```
RESULT 1226
AAF50620
ID   AAF50620 standard; DNA; 15 BP.
XX
AC   AAF50620;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #1580.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 8; Page 71; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 2 A; 8 C; 3 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 7.4e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1103 ACCGGCCCCCTGAC 1116
              ||||||||||||||
Db          1 ACCGGCCCCCTGAC 14


RESULT 1227
AAF50616
ID   AAF50616 standard; DNA; 15 BP.
XX
AC   AAF50616;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #1576.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 8; Page 71; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 1 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 7.4e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1100 GGTACCGGCCCCCT 1113
              ||||||||||||||
Db          2 GGTACCGGCCCCCT 15


RESULT 1228
ABX04015/c
ID   ABX04015 standard; DNA; 15 BP.
XX
AC   ABX04015;
XX
```

DT 09-JAN-2003 (first entry)
XX
DE Resistance genes mefA & mefE DNA fragment.
XX
KW Detection; probe; diagnosis; oral disease; paradontitis; caries; therapy;
KW polymorphism; virulence factor; antibiotic resistance gene; prognosis;
KW oral infection; detection; pathogen; coronary heart disease;
KW diabetic symptom; ss.
XX
OS Unidentified.
XX
PN DE20110013-U1.
XX
PD 18-OCT-2001.
XX
PF 13-MAR-2001; 2001DE-02010013.
XX
PR 13-MAR-2001; 2001DE-01012348.
PR 13-MAR-2001; 2001DE-02010013.
XX
PA (ROET/) ROETGER A.
XX
DR WPI; 2001-657777/76.
XX
PT Oligonucleotide array, useful for diagnosing oral diseases, particularly
PT paradontitis, carries human or microbial reference sequences.
XX
PS Claim 10; Page 29; 58pp; German.
XX
CC This invention describes a novel nucleotide carrier with probes used for
CC diagnosis of oral diseases, particularly paradontitis, but also caries,
CC especially to identify genetic predisposition (as indicated by
CC polymorphisms) to disease and to identify causative microorganisms or
CC their associated virulence factors and antibiotic resistance genes, e.g.
CC for selection of therapy and for prognosis. They are also useful for
CC research into oral infections. The carriers allow simultaneous detection
CC of both host and pathogen parameters, providing quickly and simply an
CC individual's paradontitis profile, including detection of pathogens that
CC are associated with increased risk of coronary heart diseases and/or
CC aggravation of diabetic symptoms, and of opportunistic pathogens.
CC ABX03870-ABX04044 represent DNA fragments used to illustrate the method
CC of the invention
XX
SQ Sequence 15 BP; 1 A; 2 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 7.4e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 183 CATAGACAAGACCA 196
||||||||||||||
Db 14 CATAGACAAGACCA 1

RESULT 1229
ADM76115
ID ADM76115 standard; DNA; 15 BP.
XX
AC ADM76115;
XX
DT 03-JUN-2004 (first entry)
XX
DE NEPHA gene transcriptional control region Spz1 binding site.
XX
KW Human; NEPHA; ephrin receptor; brain; chromosome 1; apoptosis;
KW drug screening; antisense therapy; gene therapy; cancer; tumour;
KW lung cancer; ovarian cancer; breast cancer; cervical cancer;
KW prostate cancer; bladder cancer; stomach cancer; colorectal cancer;
KW cytostatic; transcriptional control region; promoter;
KW transcription factor binding site; ds.
XX
OS Homo sapiens.
XX
PN JP2003289876-A.
XX
PD 14-OCT-2003.
XX
PF 05-APR-2002; 2002JP-00103497.
XX
PR 05-APR-2002; 2002JP-00103497.
XX
PA (TAKE) TAKEDA CHEM IND LTD.
XX
DR WPI; 2004-038434/04.
XX
PT Novel antisense oligonucleotide useful as anticancer agent for preventing
PT cancer e.g. lung cancer, stomach cancer, breast cancer.
XX
PS Example 2; Page 21; 38pp; Japanese.
XX
CC The invention relates to antisense oligonucleotides (ADM76030 and
CC ADM76031) targeted to the human NEPHA gene (ADM76029), which encodes a
CC novel brain-derived ephrin receptor (ADM76028). The NEPHA protein has
CC 50.7% homology to the human EphA7 ephrin receptor and its gene is located
CC on chromosome 1. Ephrin receptors are overexpressed in various cancers
CC and it has been found that inhibition of NEPHA expression promotes
CC apoptosis. The invention also relates to the NEPHA transcriptional
CC control (promoter) region (ADM76037); recombinant vectors and host cells
CC comprising the NEPHA promoter operably linked to a reporter gene; a
CC method of screening for compounds which inhibit or activate transcription
CC of the NEPHA gene; and pharmaceutical compositions comprising an
CC antisense oligonucleotide or a transcriptional inhibitor or activator.
CC The antisense oligonucleotides and modulators of NEPHA transcription are
CC useful for inducing apoptosis for the treatment and/or prevention of
CC cancers in which NEPHA is overexpressed such as lung cancer, ovarian
CC cancer, breast cancer, cervical cancer, prostate cancer, bladder cancer,
CC stomach cancer and colorectal cancer. Sequences ADM76038-ADM76371
CC represent transcription factor binding sites within the transcriptional
CC control region of the NEPHA gene.
XX
SQ Sequence 15 BP; 4 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 7.4e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1645 CTGGAGGGATGCCA 1658
||||||||||||||
Db 2 CTGGAGGGATGCCA 15

RESULT 1230
AAX74928
ID AAX74928 standard; RNA; 17 BP.
XX
AC AAX74928;
XX
DT 28-JUL-1999 (first entry)
XX
DE Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #456.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Mus sp.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.
XX
PF 25-OCT-1996; 96WO-US017480.
XX
PR 26-OCT-1995; 95US-0005974P.

```
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 168; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 4 A; 4 C; 3 G; 0 T; 6 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   71.4%;  Pred. No. 8.3e+02;
  Matches   10;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        539 CCATCTTTGACAAG 552
              |||:|:::||||||
Db          2 CCAUCUUUGACAAG 15


RESULT 1231
AAX71437
ID   AAX71437 standard; RNA; 17 BP.
XX
AC   AAX71437;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human KDR VEGF receptor hammerhead ribozyme substrate #449.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 110; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 4 A; 4 C; 6 G; 0 T; 3 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   85.7%;  Pred. No. 8.3e+02;
  Matches   12;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        819 GGAGAAGTCCCTCA 832
              |||||||:|||:||
Db          1 GGAGAAGUCCCUCA 14


RESULT 1232
AAX74911
ID   AAX74911 standard; RNA; 17 BP.
XX
AC   AAX74911;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #439.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 168; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
```

```
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   71.4%;  Pred. No. 8.3e+02;
  Matches   10;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1033 GACTTTGGCCTGGC 1046
              |||:::||||:|||
Db          4 GACUUUGGCCUGGC 17


RESULT 1233
AAX74927
ID   AAX74927 standard; RNA; 17 BP.
XX
AC   AAX74927;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #455.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 168; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 5 A; 4 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   71.4%;  Pred. No. 8.3e+02;
  Matches   10;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        539 CCATCTTTGACAAG 552
              |||:|:::||||||
Db          3 CCAUCUUUGACAAG 16


RESULT 1234
AAV97498/c
ID   AAV97498 standard; RNA; 17 BP.
XX
AC   AAV97498;
XX
DT   17-MAR-1999  (first entry)
XX
DE   Human EGF-R target sequence nucleotide position 2416.
XX
KW   Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
KW   hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
KW   cancer; genetic drift; detection; mutation; ss.
XX
OS   Homo sapiens.
XX
PN   WO9833893-A2.
XX
PD   06-AUG-1998.
XX
PF   14-JAN-1998;   98WO-US000730.
XX
PR   31-JAN-1997;   97US-0036476P.
PR   04-DEC-1997;   97US-00985162.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (UYAS-) UNIV ASTON.
XX
PI   Akhtar S,  Fell P,  Mcswiggen JA;
XX
DR   WPI; 1998-437449/37.
XX
PT   Enzymatic nucleic acids - which cleave RNA derived from an epidermal
PT   growth factor receptor, useful for inhibiting cell proliferation and for
PT   treating cancers.
XX
PS   Claim 5; Page 73; 109pp; English.
XX
CC   The present invention describes enzymatic nucleic acid molecules (NAMs)
CC   which specifically cleave RNA derived from an epidermal growth factor
CC   receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
CC   represent specifically claimed target sequence from human EGF-R. AAV98044
CC   to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and
CC   hairpin ribozymes respectively for human EGF-R. The NAMs are useful for
CC   cleaving EGF-R RNA in the treatment of a condition associated with EGFR
CC   expression levels e.g. to inhibit cell proliferation in the prevention or
CC   treatment of cancers. The NAMs can also be used as diagnostic tools to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of EGF-R RNA in a cell
XX
SQ   Sequence 17 BP; 5 A; 5 C; 4 G; 0 T; 3 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 8.3e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1366 CTTGATAGCGACGG 1379
              ||||||||||||||
Db         14 CTTGATAGCGACGG 1


RESULT 1235
AAV97497/c
ID   AAV97497 standard; RNA; 17 BP.
XX
AC   AAV97497;
XX
DT   17-MAR-1999  (first entry)
XX
```

DE Human EGF-R target sequence nucleotide position 2412.
XX
KW Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
KW hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
KW cancer; genetic drift; detection; mutation; ss.
XX
OS Homo sapiens.
XX
PN WO9833893-A2.
XX
PD 06-AUG-1998.
XX
PF 14-JAN-1998; 98WO-US000730.
XX
PR 31-JAN-1997; 97US-0036476P.
PR 04-DEC-1997; 97US-00985162.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (UYAS-) UNIV ASTON.
XX
PI Akhtar S, Fell P, Mcswiggen JA;
XX
DR WPI; 1998-437449/37.
XX
PT Enzymatic nucleic acids - which cleave RNA derived from an epidermal
PT growth factor receptor, useful for inhibiting cell proliferation and for
PT treating cancers.
XX
PS Claim 5; Page 73; 109pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules (NAMs)
CC which specifically cleave RNA derived from an epidermal growth factor
CC receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
CC represent specifically claimed target sequence from human EGF-R. AAV98044
CC to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and
CC hairpin ribozymes respectively for human EGF-R. The NAMs are useful for
CC cleaving EGF-R RNA in the treatment of a condition associated with EGFR
CC expression levels e.g. to inhibit cell proliferation in the prevention or
CC treatment of cancers. The NAMs can also be used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of EGF-R RNA in a cell
XX
SQ Sequence 17 BP; 4 A; 6 C; 2 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1367 TTGATAGCGACGGG 1380
||||||||||||||
Db 17 TTGATAGCGACGGG 4

RESULT 1236
ABK02332
ID ABK02332 standard; RNA; 17 BP.
XX
AC ABK02332;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human NOGO Amberzyme #4.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 88; Page 130; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is an amberzyme molecule of the invention
XX
SQ Sequence 17 BP; 1 A; 8 C; 6 G; 0 T; 2 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 85.7%; Pred. No. 8.3e+02;
Matches 12; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 83 CCCGCGGCTCTGAG 96
||||||||:|:|||
Db 4 CCCGCGGCUCUGAG 17

```
RESULT 1237
ABK01785
ID   ABK01785 standard; RNA; 17 BP.
XX
AC   ABK01785;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human NOGO Zinzyme #107.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US004273.
XX
PR   11-FEB-2000; 2000US-0181797P.
PR   28-FEB-2000; 2000US-0185516P.
PR   06-MAR-2000; 2000US-0187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L,  Mcswiggen J,  Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT   central nervous system injury.
XX
PS   Claim 88; Page 97; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO). The
CC   nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC   an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC   with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC   of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC   Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC   the cell and treat a patient having a condition associated with the level
CC   of CD20. The treatment may further comprise the use of one or more
CC   therapies. In particular, the CD20 targetting nucleic acid may be used to
CC   treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC   Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC   leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC   lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC   immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC   targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC   presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC   nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC   cell and treat a patient having a condition associated with the level of
CC   NOGO. The treatment may further comprise the use of one or more
CC   therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC   treat central nervous system (CNS) injury and cerebrovascular accident
CC   (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The present
CC   sequence is a zinzyme molecule of the invention
XX
SQ   Sequence 17 BP; 2 A; 7 C; 6 G; 0 T; 2 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   85.7%;  Pred. No. 8.3e+02;
  Matches   12;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         83 CCCGCGGCTCTGAG 96
              ||||||||:|:|||
Db          3 CCCGCGGCUCUGAG 16


RESULT 1238
ABK00760
ID   ABK00760 standard; RNA; 17 BP.
XX
AC   ABK00760;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human NOGO Inozyme #30.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US004273.
XX
PR   11-FEB-2000; 2000US-0181797P.
PR   28-FEB-2000; 2000US-0185516P.
PR   06-MAR-2000; 2000US-0187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L,  Mcswiggen J,  Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT   central nervous system injury.
```

```
XX
PS   Claim 88; Page 78; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO). The
CC   nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC   an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC   with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC   of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC   Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC   the cell and treat a patient having a condition associated with the level
CC   of CD20. The treatment may further comprise the use of one or more
CC   therapies. In particular, the CD20 targetting nucleic acid may be used to
CC   treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC   Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC   leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC   lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC   immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC   targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC   presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC   nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC   cell and treat a patient having a condition associated with the level of
CC   NOGO. The treatment may further comprise the use of one or more
CC   therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC   treat central nervous system (CNS) injury and cerebrovascular accident
CC   (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The present
CC   sequence is an inozyme of the invention
XX
SQ   Sequence 17 BP; 2 A; 7 C; 6 G; 0 T; 2 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   85.7%;  Pred. No. 8.3e+02;
  Matches   12;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         83 CCCGCGGCTCTGAG 96
              ||||||||:|:|||
Db          1 CCCGCGGCUCUGAG 14


RESULT 1239
ABL46440/c
ID   ABL46440 standard; RNA; 17 BP.
XX
AC   ABL46440;
XX
DT   27-JUN-2003  (first entry)
XX
DE   Human GRID hammerhead ribozyme substrate oligonucleotide #73.
XX
KW   Human; Grb2-related with Insert Domain; GRID; T-cell;
KW   co-stimulatory adaptor protein; tissue rejection; graft rejection;
KW   leukaemia; cytostatic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200162911-A2.
XX
PD   30-AUG-2001.
XX
PF   23-FEB-2001; 2001WO-US005957.
XX
PR   24-FEB-2000; 2000US-0184594P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T,  Von Carlowitz I,  Mcswiggen JA,  Hamblin PA,  Ellis JH;
XX
DR   WPI; 2001-550088/61.
XX
PT   New nucleic acid(s) for regulating the Grb2-related with Insert Domain
PT   (GRID) gene comprises using antisense and enzymatic nucleic acid
PT   molecules such as hammerhead ribozymes.
XX
PS   Claim 4; Page 60; 108pp; English.
XX
CC   The present invention relates to oligonucleotides that downregulate the
CC   expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
CC   a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
CC   for modulating the expression of GRID, to treat conditions such as
CC   tissue/graft rejection and leukaemia. The oligonucleotides can also be
CC   administered in conjunction with other therapies such as radiation,
CC   chemotherapy and cyclosporin treatment. The present oligonucleotide was
CC   used to illustrate the invention
XX
SQ   Sequence 17 BP; 5 A; 6 C; 1 G; 0 T; 5 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 8.3e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        598 TTTGGGAAACTGGA 611
              ||||||||||||||
Db         16 TTTGGGAAACTGGA 3


RESULT 1240
ABL46441/c
ID   ABL46441 standard; RNA; 17 BP.
XX
AC   ABL46441;
XX
DT   27-JUN-2003  (first entry)
XX
DE   Human GRID hammerhead ribozyme substrate oligonucleotide #74.
XX
KW   Human; Grb2-related with Insert Domain; GRID; T-cell;
KW   co-stimulatory adaptor protein; tissue rejection; graft rejection;
KW   leukaemia; cytostatic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200162911-A2.
XX
PD   30-AUG-2001.
XX
PF   23-FEB-2001; 2001WO-US005957.
XX
PR   24-FEB-2000; 2000US-0184594P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T,  Von Carlowitz I,  Mcswiggen JA,  Hamblin PA,  Ellis JH;
XX
DR   WPI; 2001-550088/61.
XX
PT   New nucleic acid(s) for regulating the Grb2-related with Insert Domain
PT   (GRID) gene comprises using antisense and enzymatic nucleic acid
PT   molecules such as hammerhead ribozymes.
XX
PS   Claim 4; Page 60; 108pp; English.
XX
CC   The present invention relates to oligonucleotides that downregulate the
CC   expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
CC   a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
CC   for modulating the expression of GRID, to treat conditions such as
CC   tissue/graft rejection and leukaemia. The oligonucleotides can also be
CC   administered in conjunction with other therapies such as radiation,
```

```
CC   chemotherapy and cyclosporin treatment. The present oligonucleotide was
CC   used to illustrate the invention
XX
SQ   Sequence 17 BP; 5 A; 5 C; 2 G; 0 T; 5 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 8.3e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        598 TTTGGGAAACTGGA 611
              ||||||||||||||
Db         15 TTTGGGAAACTGGA 2


RESULT 1241
ABL46442/c
ID   ABL46442 standard; RNA; 17 BP.
XX
AC   ABL46442;
XX
DT   27-JUN-2003  (first entry)
XX
DE   Human GRID hammerhead ribozyme substrate oligonucleotide #75.
XX
KW   Human; Grb2-related with Insert Domain; GRID; T-cell;
KW   co-stimulatory adaptor protein; tissue rejection; graft rejection;
KW   leukaemia; cytostatic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200162911-A2.
XX
PD   30-AUG-2001.
XX
PF   23-FEB-2001; 2001WO-US005957.
XX
PR   24-FEB-2000; 2000US-0184594P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T,  Von Carlowitz I,  Mcswiggen JA,  Hamblin PA,  Ellis JH;
XX
DR   WPI; 2001-550088/61.
XX
PT   New nucleic acid(s) for regulating the Grb2-related with Insert Domain
PT   (GRID) gene comprises using antisense and enzymatic nucleic acid
PT   molecules such as hammerhead ribozymes.
XX
PS   Claim 4; Page 60; 108pp; English.
XX
CC   The present invention relates to oligonucleotides that downregulate the
CC   expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
CC   a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
CC   for modulating the expression of GRID, to treat conditions such as
CC   tissue/graft rejection and leukaemia. The oligonucleotides can also be
CC   administered in conjunction with other therapies such as radiation,
CC   chemotherapy and cyclosporin treatment. The present oligonucleotide was
CC   used to illustrate the invention
XX
SQ   Sequence 17 BP; 4 A; 5 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 8.3e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        598 TTTGGGAAACTGGA 611
              ||||||||||||||
Db         14 TTTGGGAAACTGGA 1


RESULT 1242
ABS75015
ID   ABS75015 standard; DNA; 17 BP.
XX
AC   ABS75015;
XX
DT   24-DEC-2002  (first entry)
XX
DE   Human PAPP-Ea associated 17-mer SEQ ID 541.
XX
KW   PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW   contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW   dysgenetic pregnancy; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002102252-A1.
XX
PD   01-AUG-2002.
XX
PF   06-APR-2001; 2001US-00827998.
XX
PR   26-MAY-2000; 2000US-0207456P.
XX
PA   (GUYY/) GU Y.
PA   (SHAN/) SHANNON M E.
XX
PI   Gu Y,  Shannon ME;
XX
DR   WPI; 2002-697817/75.
XX
PT   New isolated nucleic acid encoding an isoform of human pregnancy
PT   associated plasma protein E, for preventing or aborting pregnancy.
XX
PS   Example 2; Page 146; 353pp; English.
XX
CC   This invention describes a novel isolated nucleic acid that encodes one
CC   of three new isoforms of human pregnancy associated plasma protein E,
CC   hPAPP-E. The products of the invention have abortive and contraceptive
CC   activity and can be used for gene therapy or in a vaccine. The nucleic
CC   acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC   used in pharmaceutical compositions or vaccines for preventing or
CC   aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC   dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC   the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC   antibodies can be used to assess the expression levels of PAPP-E isoform
CC   proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC   antenatally. This sequence represents an oligomer used in scanning the
CC   human PAPP-E genes described in the disclosure of the invention
XX
SQ   Sequence 17 BP; 4 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 8.3e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        287 AACTTCGTTCTGCA 300
              ||||||||||||||
Db          4 AACTTCGTTCTGCA 17


RESULT 1243
ABS75016
ID   ABS75016 standard; DNA; 17 BP.
XX
AC   ABS75016;
XX
DT   24-DEC-2002  (first entry)
XX
DE   Human PAPP-Ea associated 17-mer SEQ ID 542.
XX
KW   PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW   contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW   dysgenetic pregnancy; primer; ss.
XX
```

OS Homo sapiens.
XX
PN US2002102252-A1.
XX
PD 01-AUG-2002.
XX
PF 06-APR-2001; 2001US-00827998.
XX
PR 26-MAY-2000; 2000US-0207456P.
XX
PA (GUYY/) GU Y.
PA (SHAN/) SHANNON M E.
XX
PI Gu Y, Shannon ME;
XX
DR WPI; 2002-697817/75.
XX
PT New isolated nucleic acid encoding an isoform of human pregnancy
PT associated plasma protein E, for preventing or aborting pregnancy.
XX
PS Example 2; Page 146; 353pp; English.
XX
CC This invention describes a novel isolated nucleic acid that encodes one
CC of three new isoforms of human pregnancy associated plasma protein E,
CC hPAPP-E. The products of the invention have abortive and contraceptive
CC activity and can be used for gene therapy or in a vaccine. The nucleic
CC acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC used in pharmaceutical compositions or vaccines for preventing or
CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC antibodies can be used to assess the expression levels of PAPP-E isoform
CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC antenatally. This sequence represents an oligomer used in scanning the
CC human PAPP-E genes described in the disclosure of the invention
XX
SQ Sequence 17 BP; 4 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 287 AACTTCGTTCTGCA 300
||||||||||||||
Db 3 AACTTCGTTCTGCA 16

RESULT 1244
AAD46160
ID AAD46160 standard; DNA; 17 BP.
XX
AC AAD46160;
XX
DT 29-AUG-2003 (revised)
DT 27-DEC-2002 (first entry)
XX
DE 3900 PCR primer, to clone T. reesei L-arabinitol 4-dehydrogenase gene.
XX
KW Genetically modified fungus; L-arabinose; L-arabinitol 4-dehydrogenase;
KW EC 1.1.1.12; L-xylulose reductase; EC 1.1.1.10; agricultural product;
KW biomass; lactic acid; xylitol; forestry product; fermentable sugar;
KW ethanol; enzyme; PCR; primer; ss.
XX
OS Hypocrea jecorina.
XX
PN WO200266616-A2.
XX
PD 29-AUG-2002.
XX
PF 15-FEB-2002; 2002WO-FI000125.
XX
PR 16-FEB-2001; 2001FI-00000308.
XX
PA (VALW) VALTION TEKNILLINEN TUTKIMUSKESKUS.
XX
PI Londesborough J, Penttilae M, Richard P;
XX
DR WPI; 2002-691618/74.
XX
PT Genetically modified fungus for producing useful products such as
PT ethanol, lactic acid and xylitol, from biomass containing L-arabinose,
PT has increased ability to utilize L-arabinose.
XX
PS Example 2; Page 14; 32pp; English.
XX
CC The invention relates to genetically modified fungus with an increased
CC ability to utilise L-arabinose, where the fungus has been transformed
CC with a DNA sequence encoding an L-arabinitol 4-dehydrogenase (EC 1.1.
CC 1.12) or L-xylulose reductase (EC 1.1.1.10) or both the DNA sequences.
CC Genetically modified fungus is useful for producing useful products from
CC biomass containing L-arabinose. The useful product include ethanol,
CC lactic acid or xylitol preferably ethanol. It is also useful to ferment a
CC carbon source such as biomass comprising agricultural or forestry
CC products and waste products containing L-arabinose and also other
CC pentoses or other fermentable sugars. The present sequence is a PCR
CC primer used to clone T. reesei L-arabinitol 4-dehydrogenase gene.
CC (Updated on 29-AUG-2003 to standardise OS field)
XX
SQ Sequence 17 BP; 5 A; 1 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 8 AGCGTAAAGGATGG 21
||||||||||||||
Db 2 AGCGTAAAGGATGG 15

RESULT 1245
ABT36202
ID ABT36202 standard; DNA; 17 BP.
XX
AC ABT36202;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 1839.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001FR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 248; 720pp; French.
XX

CC The invention relates to a novel isolated 17 mer nucleic acid sequence, CC given in the specification, a sequence containing at least 15 consecutive CC nucleotides from the 17 mer sequence, a sequence with, after optimal CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that CC hybridizes to them under highly stringent conditions, or the complement CC of any of them, or the corresponding RNA. The novel isolated nucleic CC acids of the invention are useful as probes and primers for detecting, CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one CC component of a gene chip, in vitro as (anti)sense reagents, and for CC production of recombinant polypeptides. Any of the nucleic acids, CC polypeptides, vectors containing the nucleic acids, cells containing the CC vector or antibodies directed against the polypeptides are useful for CC preparation of pharmaceuticals for prevention and/or treatment of viral CC diseases that are characterised by development of tumours or cell CC degeneration, specifically cancer but also Alzheimer's disease and CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in CC patient samples is useful for diagnosis and/or prognosis of these CC diseases. The polypeptides can also be used to generate antibodies, and CC both the polypeptide and antibodies are useful as components of protein CC chips. The nucleic acid sequences of the invention can be used in gene CC therapy. This polynucleotide sequence represents a tumour suppression CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 4 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1573 TCAGGCAGGCCAGC 1586
||||||||||||||
Db 3 TCAGGCAGGCCAGC 16

RESULT 1246
ACA06338
ID ACA06338 standard; RNA; 17 BP.
XX
AC ACA06338;
XX
DT 03-JUN-2003 (first entry)
XX
DE NFKB sub-unit modulating inozyme substrate #157.
XX
KW Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS Homo sapiens.
XX
PN US2002177568-A1.
XX
PD 28-NOV-2002.
XX
PF 23-MAY-2001; 2001US-00864785.
XX
PR 07-DEC-1992; 92US-00987132.
PR 18-MAY-1994; 94US-00245466.
PR 15-AUG-1994; 94US-00291932.
PR 23-DEC-1996; 96US-00777916.
XX
PA (STIN/) STINCHCOMB D T.
PA (MCSW/) MCSWIGGEN J.
PA (DRAP/) DRAPER K G.
XX
PI Stinchcomb DT, Mcswiggen J, Draper KG;
XX
DR WPI; 2003-340953/32.
XX
PT Novel enzymatic nucleic acid molecules which down regulates expression of
PT a sequence encoding a subunit of nuclear factor kappa B useful for
PT treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS Claim 3; Page 29; 72pp; English.
XX
CC The invention describes an enzymatic nucleic acid molecule (I) which down
CC regulates expression of a sequence encoding a subunit of nuclear factor
CC kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC configuration. The enzymatic nucleic acid molecule is adapted to treat
CC cancer and is useful for down-regulating REL-A activity in a cell, for
CC treating a patient having a condition associated with the level of REL-A.
CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC antisense nucleic acid molecules are useful for treating breast, lung,
CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC multidrug resistant cancer. The method involves use of other drug
CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC acid molecules are also useful for treating inflammatory disease such as
CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC rejection, gene therapy applications, ischaemia/reperfusion injury
CC (central nervous system (CNS) and myocardial), glomerulonephritis,
CC sepsis, allergic airway inflammation, inflammatory bowel disease or
CC infection. This sequence represents the substrate of a novel enzymatic
CC nucleic acid molecule
XX
SQ Sequence 17 BP; 5 A; 5 C; 1 G; 0 T; 6 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 71.4%; Pred. No. 8.3e+02;
Matches 10; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 538 CCCATCTTTGACAA 551
|||||:|:::|||||
Db 3 CCCAUCUUUGACAA 16

RESULT 1247
ABZ61324
ID ABZ61324 standard; RNA; 17 BP.
XX
AC ABZ61324;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human H-Ras DNAzyme target #115.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
PF 29-MAY-2002; 2002WO-US016840.
XX
PR 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.

XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J;
XX
DR WPI; 2003-140484/13.
XX
PT Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS Claim 58; Page 113; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 2 A; 11 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 103 CGCGCGCCCCCGCC 116
||||||||||||||
Db 4 CGCGCGCCCCCGCC 17

RESULT 1248
ABZ62179/c
ID ABZ62179 standard; RNA; 17 BP.
XX
AC ABZ62179;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human H-Ras DNAzyme target #970.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
PF 29-MAY-2002; 2002WO-US016840.
XX
PR 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J;
XX
DR WPI; 2003-140484/13.
XX
PT Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS Claim 58; Page 131; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 2 A; 5 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 515 TGGAGAAGCTGACC 528
||||||||||||||
Db 17 TGGAGAAGCTGACC 4

RESULT 1249
ACF62527
ID ACF62527 standard; DNA; 17 BP.
XX
AC ACF62527;
XX
DT 08-OCT-2003 (first entry)
XX
DE Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:356.
XX
KW Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;
KW cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;
KW cytostatic; PCR primer; ss.
XX
OS Synthetic.
XX
PN WO2003013534-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008219.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-268144/26.
XX
PT New use of irinotecan for preparation of compositions for treating cancer
PT in subject having genome with variant allele comprising cytochrome p450,
PT subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
XX
PS Disclosure; Page 42; 86pp; English.
XX
CC The present invention describes the use of irinotecan (I) or its
CC derivative for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject having a genome with a variant
CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine
CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have
CC cytostatic activity. The therapeutic applications of (I) is improved,
CC since it is possible to individually treat a subject with an appropriate
CC dosage and/or an appropriate derivative of (I). Therefore, undesirable,
CC harmful or toxic effects are efficiently avoided. Unnecessary and

```
CC   potentially harmful treatment of those subjects who do not respond to the
CC   treatment with substances (nonresponders), as well as the development of
CC   drug resistances due to suboptimal drug dosing can be avoided. ACF62200
CC   to ACF62751 and ABM34912 to ABM35013 represent sequences used in the
CC   exemplification of the present invention
XX
SQ   Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 8.3e+02;
  Matches   14;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         52 GCAGTGTGACTGCTGA 67
              ||| |||:||||||||
Db          2 GCAATGTRACTGCTGA 17


RESULT 1250
ADB21198
ID   ADB21198 standard; DNA; 17 BP.
XX
AC   ADB21198;
XX
DT   20-NOV-2003  (first entry)
XX
DE   MRP1 based cancer related nucleic acid SEQ ID NO:356.
XX
KW   irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW   lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW   variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
KW   ds.
XX
OS   Unidentified.
XX
PN   WO2003013533-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008200.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-354397/33.
XX
PT   Use of irinotecan or its derivative for preparation of a pharmaceutical
PT   composition for treating cancer in a subject having a genome with a
PT   variant allele comprising a multidrug resistance protein 1
PT   polynucleotide.
XX
PS   Disclosure; Page 51; 100pp; English.
XX
CC   The present invention describes a method for the use of irinotecan (I) or
CC   its derivative for the preparation of a pharmaceutical composition for
CC   treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC   cancer, or malignant glioma in a subject having a genome with a variant
CC   allele which comprises a multidrug resistance protein 1 (MRP1)
CC   polynucleotide (II). (I) has cytostatic activity. (I) or its derivative
CC   can be used for the preparation of a pharmaceutical composition for
CC   treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC   cancer, or malignant glioma in a subject, where the subject is a human
CC   (preferably African or Asian) or a mouse. The present sequence represents
CC   a sequence which is used in the exemplification of the present invention.
XX
SQ   Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 8.3e+02;
  Matches   14;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         52 GCAGTGTGACTGCTGA 67
              ||| |||:||||||||
Db          2 GCAATGTRACTGCTGA 17


RESULT 1251
ADB88287
ID   ADB88287 standard; DNA; 17 BP.
XX
AC   ADB88287;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human UGT1A1 variant allele sequence fragment SEQ ID NO:328.
XX
KW   ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
KW   colorectal cancer; cervical cancer; gastric cancer; lung cancer;
KW   ovarian cancer; pancreatic cancer; malignant glioma;
KW   uridine diphosphate glycosyltransferase1 member A1.
XX
OS   Homo sapiens.
XX
PN   WO2003013536-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008217.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-289896/28.
XX
PT   Use of irinotecan to treat cancer patient by determining if patient has
PT   variant alleles of UGT1A1 gene, administering increased/decreased amounts
PT   of irinotecan based on increased/decreased levels of UGT1A1 gene product.
XX
PS   Disclosure; Page 55; 107pp; English.
XX
CC   The invention relates to the novel use of irinotecan to treat a patient
CC   suffering from cancer. This involves determining if the patient has one
CC   or more variant alleles of the UGT1A1 gene, and if the patient has one or
CC   more of such variant alleles, irinotecan is administered in an increased
CC   or decreased amount in comparison to the amount that is administered
CC   without regard to the patient's alleles in the UGT1A1 gene. The invention
CC   has cytostatic activity. A composition of the invention acts as a
CC   topoisomerase I inhibitor. The method is useful for treating a patient,
CC   an animal e.g. mouse or a human, preferably African or Asian, suffering
CC   from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,
CC   pancreatic cancer or malignant glioma. The present sequence is udes in
CC   the exemplification of the invention.
XX
SQ   Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 8.3e+02;
  Matches   14;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         52 GCAGTGTGACTGCTGA 67
              ||| |||:||||||||
Db          2 GCAATGTRACTGCTGA 17


RESULT 1252
ADB97270
ID   ADB97270 standard; DNA; 17 BP.
XX
AC   ADB97270;
```

```
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human MDR1 variant allele sequence fragment SEQ ID NO:356.
XX
KW   irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW   lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW   multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;
KW   TOP1.
XX
OS   Homo sapiens.
XX
PN   WO2003013537-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008218.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-268145/26.
XX
PT   New use of irinotecan for preparation of pharmaceutical compositions for
PT   treating cancer in subject having genome with variant allele comprising
PT   multidrug resistance 1 polynucleotide.
XX
PS   Disclosure; Page 79; 130pp; English.
XX
CC   The invention relates to the novel use of irinotecan or its derivative
CC   for the preparation of pharmaceutical compositions for treating
CC   colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or
CC   malignant glioma in a subject having a genome with a variant allele which
CC   comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition
CC   of the invention has cytostatic activity. The invention is useful for the
CC   preparation of pharmaceutical compositions for treating colorectal,
CC   cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC   glioma in a subject (preferably human, more preferably African or Asian)
CC   or a mouse. The present sequence is used in the exemplification of the
CC   invention.
XX
SQ   Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 8.3e+02;
  Matches   14;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         52 GCAGTGTGACTGCTGA 67
              ||| |||:||||||||
Db          2 GCAATGTRACTGCTGA 17


RESULT 1253
ADB92461
ID   ADB92461 standard; DNA; 17 BP.
XX
AC   ADB92461;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human MDR1 variant allele sequence fragment SEQ ID NO:356.
XX
KW   irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW   lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW   multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.
XX
OS   Homo sapiens.
XX
PN   WO2003013535-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008220.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-342400/32.
XX
PT   New use of irinotecan for preparation of pharmaceutical compositions for
PT   treating cancer in subject having genome with variant allele comprising
PT   multidrug resistance 1 polynucleotide.
XX
PS   Disclosure; Page 50; 104pp; English.
XX
CC   The invention relates ro a novel use of irinotecan or its derivative for
CC   the preparation of a pharmaceutical composition for treating colorectal,
CC   cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC   glioma in a subject having a genome with a variant allele which comprises
CC   a multidrug resistance 1 (MDR1) polynucleotide. A composition of the
CC   invention has cytostatic activity. The present sequence is used in the
CC   exemplification of the invention.
XX
SQ   Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 8.3e+02;
  Matches   14;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         52 GCAGTGTGACTGCTGA 67
              ||| |||:||||||||
Db          2 GCAATGTRACTGCTGA 17


RESULT 1254
ADM53798/c
ID   ADM53798 standard; mRNA; 17 BP.
XX
AC   ADM53798;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Human GRID mRNA substrate sequence #73.
XX
KW   Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;
KW   NCH ribozyme; G-cleaver ribozyme; Zinzyme; DNAzyme; amberzyme; Inozyme;
KW   hairpin ribozyme; tissue rejection; graft rejection; leukaemia.
XX
OS   Homo sapiens.
XX
PN   US2003134806-A1.
XX
PD   17-JUL-2003.
XX
PF   23-FEB-2001; 2001US-00792818.
XX
PR   10-FEB-2000; 2000US-0181594P.
XX
PA   (JARV/) JARVIS T.
PA   (CARL/) CARLOWITZ I V.
PA   (MCSW/) MCSWIGGEN J.
PA   (HAMB/) HAMBLIN P A.
PA   (ELLI/) ELLIS J H.
XX
PI   Jarvis T,  Carlowitz IV,  Mcswiggen J,  Hamblin PA,  Ellis JH;
XX
DR   WPI; 2003-829646/77.
XX
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PT New nucleic acid molecule that down-regulates expression of Grb2-related
PT with insert domain (GRID) gene, useful for treating a condition
PT associated with the level of GRID, e.g. tissue/graft rejection and
PT leukemia.
XX
PS Claim 4; SEQ ID NO 73; 74pp; English.
XX
CC The invention relates to a nucleic acid molecule that down-regulates
CC expression of Grb2-related with insert domain (GRID) gene, e.g. a
CC hammerhead ribozyme, NCH ribozyme, G-cleaver ribozyme, Zinzyme, DNAzyme,
CC amberzyme, Inozyme or hairpin ribozyme. Also include are a mammalian cell
CC including the novel nucleic acid molecule, reducing GRID activity in a
CC cell by contacting the cell with the novel nucleic acid molecule,
CC treating a patient having a condition associated with the level of GRID
CC (e.g. tissue/graft rejection or leukaemia) by contacting the cell with
CC the novel nucleic acid molecule, cleaving RNA of a GRID gene by
CC contacting the cell with the novel nucleic acid molecule, an expression
CC vector comprising a nucleic acid sequences (encoding at least the novel
CC nucleic acid molecule in a manner that allows its expression), a
CC mammalian cell including the expression vector and an enzymatic nucleic
CC acid molecule that cleaves RNA derived from a GRID gene. The nucleic acid
CC molecule is useful for treating a condition associated with the level of
CC GRID, e.g. tissue/graft rejection and leukaemia. The present sequence is
CC a target region for the enzymatic nucleic acids of the invention.
XX
SQ Sequence 17 BP; 5 A; 6 C; 1 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 598 TTTGGGAAACTGGA 611
||||||||||||||
Db 16 TTTGGGAAACTGGA 3

RESULT 1255
ADM53799/c
ID ADM53799 standard; mRNA; 17 BP.
XX
AC ADM53799;
XX
DT 03-JUN-2004 (first entry)
XX
DE Human GRID mRNA substrate sequence #74.
XX
KW Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;
KW NCH ribozyme; G-cleaver ribozyme; Zinzyme; DNAzyme; amberzyme; Inozyme;
KW hairpin ribozyme; tissue rejection; graft rejection; leukaemia.
XX
OS Homo sapiens.
XX
PN US2003134806-A1.
XX
PD 17-JUL-2003.
XX
PF 23-FEB-2001; 2001US-00792818.
XX
PR 10-FEB-2000; 2000US-0181594P.
XX
PA (JARV/) JARVIS T.
PA (CARL/) CARLOWITZ I V.
PA (MCSW/) MCSWIGGEN J.
PA (HAMB/) HAMBLIN P A.
PA (ELLI/) ELLIS J H.
XX
PI Jarvis T, Carlowitz IV, Mcswiggen J, Hamblin PA, Ellis JH;
XX
DR WPI; 2003-829646/77.
XX
PT New nucleic acid molecule that down-regulates expression of Grb2-related
PT with insert domain (GRID) gene, useful for treating a condition
PT associated with the level of GRID, e.g. tissue/graft rejection and
PT leukemia.
XX
PS Claim 4; SEQ ID NO 74; 74pp; English.
XX
CC The invention relates to a nucleic acid molecule that down-regulates
CC expression of Grb2-related with insert domain (GRID) gene, e.g. a
CC hammerhead ribozyme, NCH ribozyme, G-cleaver ribozyme, Zinzyme, DNAzyme,
CC amberzyme, Inozyme or hairpin ribozyme. Also include are a mammalian cell
CC including the novel nucleic acid molecule, reducing GRID activity in a
CC cell by contacting the cell with the novel nucleic acid molecule,
CC treating a patient having a condition associated with the level of GRID
CC (e.g. tissue/graft rejection or leukaemia) by contacting the cell with
CC the novel nucleic acid molecule, cleaving RNA of a GRID gene by
CC contacting the cell with the novel nucleic acid molecule, an expression
CC vector comprising a nucleic acid sequences (encoding at least the novel
CC nucleic acid molecule in a manner that allows its expression), a
CC mammalian cell including the expression vector and an enzymatic nucleic
CC acid molecule that cleaves RNA derived from a GRID gene. The nucleic acid
CC molecule is useful for treating a condition associated with the level of
CC GRID, e.g. tissue/graft rejection and leukaemia. The present sequence is
CC a target region for the enzymatic nucleic acids of the invention.
XX
SQ Sequence 17 BP; 5 A; 5 C; 2 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 8.3e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 598 TTTGGGAAACTGGA 611
||||||||||||||
Db 15 TTTGGGAAACTGGA 2

RESULT 1256
ADM53800/c
ID ADM53800 standard; mRNA; 17 BP.
XX
AC ADM53800;
XX
DT 03-JUN-2004 (first entry)
XX
DE Human GRID mRNA substrate sequence #75.
XX
KW Human; ss; GRID; Grb2-related with insert domain; hammerhead ribozyme;
KW NCH ribozyme; G-cleaver ribozyme; Zinzyme; DNAzyme; amberzyme; Inozyme;
KW hairpin ribozyme; tissue rejection; graft rejection; leukaemia.
XX
OS Homo sapiens.
XX
PN US2003134806-A1.
XX
PD 17-JUL-2003.
XX
PF 23-FEB-2001; 2001US-00792818.
XX
PR 10-FEB-2000; 2000US-0181594P.
XX
PA (JARV/) JARVIS T.
PA (CARL/) CARLOWITZ I V.
PA (MCSW/) MCSWIGGEN J.
PA (HAMB/) HAMBLIN P A.
PA (ELLI/) ELLIS J H.
XX
PI Jarvis T, Carlowitz IV, Mcswiggen J, Hamblin PA, Ellis JH;
XX
DR WPI; 2003-829646/77.
XX
PT New nucleic acid molecule that down-regulates expression of Grb2-related
PT with insert domain (GRID) gene, useful for treating a condition
PT associated with the level of GRID, e.g. tissue/graft rejection and
PT leukemia.
XX
PS Claim 4; SEQ ID NO 75; 74pp; English.

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XX
CC   The invention relates to a nucleic acid molecule that down-regulates
CC   expression of Grb2-related with insert domain (GRID) gene, e.g. a
CC   hammerhead ribozyme, NCH ribozyme, G-cleaver ribozyme, Zinzyme, DNAzyme,
CC   amberzyme, Inozyme or hairpin ribozyme. Also include are a mammalian cell
CC   including the novel nucleic acid molecule, reducing GRID activity in a
CC   cell by contacting the cell with the novel nucleic acid molecule,
CC   treating a patient having a condition associated with the level of GRID
CC   (e.g. tissue/graft rejection or leukaemia) by contacting the cell with
CC   the novel nucleic acid molecule, cleaving RNA of a GRID gene by
CC   contacting the cell with the novel nucleic acid molecule, an expression
CC   vector comprising a nucleic acid sequences (encoding at least the novel
CC   nucleic acid molecule in a manner that allows its expression), a
CC   mammalian cell including the expression vector and an enzymatic nucleic
CC   acid molecule that cleaves RNA derived from a GRID gene. The nucleic acid
CC   molecule is useful for treating a condition associated with the level of
CC   GRID, e.g. tissue/graft rejection and leukaemia. The present sequence is
CC   a target region for the enzymatic nucleic acids of the invention.
XX
SQ   Sequence 17 BP; 4 A; 5 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 8.3e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        598 TTTGGGAAACTGGA 611
              ||||||||||||||
Db         14 TTTGGGAAACTGGA 1


RESULT 1257
AAX71742
ID   AAX71742 standard; RNA; 18 BP.
XX
AC   AAX71742;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human KDR VEGF receptor hairpin ribozyme substrate #40.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 120; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 18 BP; 2 A; 9 C; 1 G; 0 T; 6 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 18;
  Best Local Similarity   64.3%;  Pred. No. 8.7e+02;
  Matches    9;  Conservative    5;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1701 CTCTCTGCCTACCT 1714
              |:|:|:|||:|||:
Db          2 CUCUCUGCCUACCU 15


RESULT 1258
AAZ41054
ID   AAZ41054 standard; DNA; 18 BP.
XX
AC   AAZ41054;
XX
DT   26-JAN-2000  (first entry)
XX
DE   Human ELK-1 phosphorothioate antisense oligonucleotide SEQ ID NO:206.
XX
KW   Identification; genetic target; gene modulation; human; probe;
KW   antisense oligonucleotide; phosphorothioate; PCR primer;
KW   nucleotide sequence-based technology; antisense drug discovery;
KW   target validation; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9953101-A1.
XX
PD   21-OCT-1999.
XX
PF   13-APR-1999;   99WO-US008268.
XX
PR   13-APR-1998;   98US-0081483P.
PR   28-APR-1998;   98US-00067638.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Cowsert LM,  Baker BF,  Mcneil J,  Freier SM,  Sasmor HM,  Brooks DG;
PI   Ohasi C,  Wyatt JR,  Borchers AH,  Vickers TA;
XX
DR   WPI; 1999-620446/53.
XX
PT   Identifying compounds which modulate expression of nucleic acids, used to
PT   provide compounds having defined physical, chemical or bioactive
PT   properties, e.g. antisense activity.
XX
PS   Example 24; Page 104; 264pp; English.
XX
CC   A method has been developed of defining a set of compounds that modulate
CC   the expression of a target nucleic acid (tNA) sequence via binding of the
CC   compounds with the tNA sequence. The method comprises generating a
CC   library of virtual compounds in silico according to defined criteria, and
CC   evaluating in silico the binding of the virtual compounds with the tNA
CC   according to defined criteria. Also described are: (1) a method of
CC   defining a set of oligonucleotides (ONs) that modulate the expression of
CC   a tNA sequence via binding of the ONs with the tNA sequence comprising
CC   generating a library of virtual compounds in silico according to defined
CC   criteria, and evaluating in silico the binding of the virtual ONs with
CC   the tNA according to defined criteria; and (2) a method of defining a set
CC   of compounds that modulate the expression of a tNA sequence via binding
CC   of the compounds with the tNA. The methods can be used for the generation
CC   and identification of synthetic compounds having defined physical,
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CC   chemical or bioactive properties. Information gathered from assays of
CC   such compounds is used to identify nucleic acid sequences that are
CC   tractable to a variety of nucleotide sequence-based technologies, e.g.
CC   antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
CC   AAY52701 to AAY52706, represent sequences used in the exemplification of
CC   the present invention
XX
SQ   Sequence 18 BP; 0 A; 2 C; 12 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.7e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        232 GGTGGTGGTGGCGG 245
              ||||||||||||||
Db          1 GGTGGTGGTGGCGG 14


RESULT 1259
AAZ06571
ID   AAZ06571 standard; DNA; 18 BP.
XX
AC   AAZ06571;
XX
DT   23-NOV-1999  (first entry)
XX
DE   ELK-1 expression modulator #9.
XX
KW   Human ELK-1; p62TCF; Ets domain transcription factor protein; apoptosis;
KW   expression inhibition; infection; inflammation; tumour formation;
KW   diagnosis; phosphorothioate; antisense compound; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .18
FT                    /*tag=  a
FT                    /note= "Internucleoside phosphorothioate linkages"
FT   modified_base    1. .4
FT                    /*tag=  b
FT                    /note= "Optionally 2-methoxyethyl (2'-MOE) nucleosides
FT                    except cytosine residues which are 5-methylcytosine"
FT   modified_base    15. .18
FT                    /*tag=  c
FT                    /note= "Optionally 2-methoxyethyl (2'-MOE) nucleosides
FT                    except cytosine residues which are 5-methylcytosine"
XX
PN   US5948680-A.
XX
PD   07-SEP-1999.
XX
PF   17-DEC-1998;   98US-00213767.
XX
PR   17-DEC-1998;   98US-00213767.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Baker BF,  Cowsert LM;
XX
DR   WPI; 1999-517959/43.
XX
PT   Antisense compound useful for diagnosis, treatment and prevention of
PT   disease associated with ELK-1 expression.
XX
PS   Claim 3; Col 38; 31pp; English.
XX
CC   Sequences AAZ06571-Z06607 are antisense polynucleotides targeted to a
CC   nucleic acid molecule encoding human ELK-1 (also known as p62TCF). ELK-1
CC   is a member of the ternary complex factor subfamily of Ets-domain
CC   transcription factor proteins. The polynucleotides inhibit the expression
CC   of human ELK-1, and this sequence targets the 5' untranslated region of
CC   the ELK-1 RNA. Sequences AAZ06571-Z06607 all cause at least 30%
CC   inhibition of ELK-1 expression. The antisense sequences can be used to
CC   inhibit the expression of human ELK-1 in human cells or tissues in vitro.
CC   ELK-1 uses a bipartite recognition mechanism mediated by both protein-DNA
CC   and protein-protein interactions to regulate genes by direct and indirect
CC   DNA binding and has been shown to control various signal transduction
CC   pathways and other cell functions including apoptosis. This means that
CC   antisense compounds inhibiting expression of ELK-1 can be used to treat
CC   diseases associated with its expression in animals, particularly humans
CC   and to prevent or delay infection, inflammation or tumour formation. The
CC   compounds can also be used for diagnosis, as research reagents and in
CC   kits
XX
SQ   Sequence 18 BP; 0 A; 2 C; 12 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 8.7e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        232 GGTGGTGGTGGCGG 245
              ||||||||||||||
Db          1 GGTGGTGGTGGCGG 14


RESULT 1260
ABA99961
ID   ABA99961 standard; DNA; 18 BP.
XX
AC   ABA99961;
XX
DT   05-JUL-2002  (first entry)
XX
DE   Human ELK-1 PCR primer #2.
XX
KW   Human; cytosine methylation; 5'-CpG-3'; uracil; cytosine; diagnosis;
KW   drug; side effect; cancer; central nervous system; cardiovascular;
KW   gastrointestinal; respiratory system; single nucleotide polymorphism;
KW   SNP; cell differentiation; ELK-1; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200218632-A2.
XX
PD   07-MAR-2002.
XX
PF   01-SEP-2001; 2001WO-EP010074.
XX
PR   01-SEP-2000; 2000DE-01043826.
PR   05-SEP-2000; 2000DE-01044543.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K,  Guetig D;
XX
DR   WPI; 2002-371829/40.
XX
PT   Determining the degree of cytosine methylation in genomic DNA, useful for
PT   diagnosis and prognosis, comprises selective hybridization of amplicons
PT   from chemically treated DNA.
XX
PS   Example 1; Page 33; 56pp; German.
XX
CC   This invention describes a novel method for determining the degree of
CC   methylation of a particular cytosine in a motif 5'-CpG-3', present in a
CC   genomic sample of DNA. The sample is treated chemically to convert
CC   cytosine (C) but not methylated C, to uracil, then part of the genomic
CC   DNA that contains the target C is amplified to form a labeled amplicon.
CC   The amplicon is hybridised to two classes, each with at least one member,
CC   of oligonucleotides and/or peptide-nucleic acid (PNA) oligomers and the
CC   degree of hybridisation to both classes is determined from the label on
CC   the amplicon. From the ratio of labels hybridised to the two classes of
CC   oligomers, the degree of methylation is calculated. The method is used:
CC   (i) for diagnosis and/or prognosis of side effects of therapeutic drugs
CC   and of a wide range of diseases, e.g. cancer, disorders of the central
CC   nervous, cardiovascular, gastrointestinal and respiratory systems etc.,
```

CC particularly by detecting mutations or single nucleotide polymorphisms
CC (SNP's); and (ii) for differentiation of cell or tissue types and for
CC investigating cell differentiation. The method allows the methylation
CC status of many C residues to be determined simultaneously. This sequence
CC represents a PCR primer used in the amplification of the human ELK-1 gene
CC used in the method of the invention
XX
SQ Sequence 18 BP; 1 A; 1 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 232 GGTGGTGGTGGCGG 245
||||||||||||||
Db 2 GGTGGTGGTGGCGG 15

RESULT 1261
AAF88946
ID AAF88946 standard; DNA; 18 BP.
XX
AC AAF88946;
XX
DT 20-JAN-2003 (first entry)
XX
DE Human ELK-1 PCR primer SEQ ID 2.
XX
KW Human; cytosine methylation; methylation status; CpG; infection; cancer;
KW diagnosis; side-effect; cardiovascular disease; gastrointestinal disease;
KW inflammation; cell differentiation; ELK-1; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200272880-A2.
XX
PD 19-SEP-2002.
XX
PF 08-MAR-2002; 2002WO-EP002572.
XX
PR 09-MAR-2001; 2001DE-01012515.
PR 19-NOV-2001; 2001DE-01058283.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Berlin K;
XX
DR WPI; 2002-723373/78.
XX
PT Detecting methylation status of test DNA in a mixture, useful for
PT diagnosis and prognosis of disease, comprises bisulfite treatment then
PT selective amplification of test DNA.
XX
PS Example 4; Page 43; 82pp; German.
XX
CC This invention describes a novel method for detecting cytosine
CC methylation in DNA samples by: (i) chemically treating a genomic sample
CC to convert all non-methylated cytosines to uracil while leaving
CC methylated cytosines unchanged; (ii) amplification with 2 primer
CC oligonucleotides and a polymerase; and (iii) analysis of the amplicon and
CC deducing the methylation status of test DNA. The method is used for
CC determining the methylation status at different CpG positions, which is
CC used for diagnosis and/or prognosis of a very wide range of disorders,
CC e.g. side-effects of pharmaceuticals, cancer, cardiovascular or
CC gastrointestinal diseases, infections, inflammation, etc. The method is
CC also useful for differentiating between cell and tissue types and for
CC investigating cell differentiation. The method: (i) provides a
CC quantitative indication of the different methylated positions, and thus a
CC very accurate classification; and (ii) eliminates interference from
CC background DNA, making it suitable for analysis of serum or body fluids
CC (which contain background DNA in large excess). This sequence represents
CC a PCR primer used to amplify the human ELK-1 gene, described in the
CC disclosure of the invention
XX
SQ Sequence 18 BP; 1 A; 1 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 232 GGTGGTGGTGGCGG 245
||||||||||||||
Db 2 GGTGGTGGTGGCGG 15

RESULT 1262
ADC70281
ID ADC70281 standard; DNA; 18 BP.
XX
AC ADC70281;
XX
DT 18-DEC-2003 (first entry)
XX
DE Primer oligo used for analysing CpG islands in genomic DNA (SeqID 771).
XX
KW PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
KW adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;
KW cytosine methylation state.
XX
OS Unidentified.
XX
PN WO2003052135-A2.
XX
PD 26-JUN-2003.
XX
PF 10-DEC-2002; 2002WO-EP014026.
XX
PR 14-DEC-2001; 2001DE-01061625.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;
PI Nimmrich I;
XX
DR WPI; 2003-533029/50.
XX
PT Detecting and differentiating cytosine methylation state of genomic DNA,
PT useful for diagnosing, treating prognosticating and/or monitoring lung
PT cell proliferative disorders e.g. adenocarcinoma and squamous cell
PT carcinoma.
XX
PS Claim 15; SEQ ID NO 771; 58pp; English.
XX
CC This invention relates to a novel method for detecting and
CC differentiating between lung cell proliferative disorders associated with
CC at least one gene and/or their regulatory regions. Specifically, it
CC refers to a method comprising contacting a target nucleic acid in a
CC biological sample with at least one reagent, wherein the reagent is able
CC to distinguish between methylated and non-methylated CpG dinucleotides
CC present in the target DNA. As such, it is possible to further
CC differentiate and diagnose medical conditions including adenocarcinoma
CC and squamous cell carcinoma, and their respective adjacent lung tissue.
CC The present invention describes cytostatic oligomers and PNA-oligomers
CC that are useful as probes for determining the cytosine methylation state
CC or single nucleotide polymorphisms (SNPs) of the target sequence. This
CC oligonucleotide sequence is a primer oligomer used for the analysis of
CC CpG positions within genomic DNA, used in an exemplification of the
CC invention.
XX
SQ Sequence 18 BP; 3 A; 0 C; 10 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 8.7e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1156 ATGTGGGGTGTGGG 1169

```
                  ||||||||||||||
Db          1 ATGTGGGGTGTGGG 14


RESULT 1263
AAZ43839
ID   AAZ43839 standard; DNA; 19 BP.
XX
AC   AAZ43839;
XX
DT   10-MAR-2000  (first entry)
XX
DE   Human adult thymus cDNA clone vh1_1 DNA probe.
XX
KW   Human; secreted protein; treatment; nutritional activity; cytokine;
KW   cell proliferation; cell differentiation; hematopoiesis regulation;
KW   tissue growth; activin; inhibin; chemotactic; chemokinetic; hemostatic;
KW   thrombolytic; anti-inflammatory; invasion suppressor; tumor inhibition;
KW   gene therapy; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9955721-A1.
XX
PD   04-NOV-1999.
XX
PF   23-APR-1999;   99WO-US008504.
XX
PR   24-APR-1998;   98US-0082904P.
PR   11-JUN-1998;   98US-0088994P.
PR   12-JUN-1998;   98US-0089278P.
PR   02-JUL-1998;   98US-0091647P.
PR   24-AUG-1998;   98US-0097639P.
PR   22-APR-1999;   99US-00097639.
XX
PA   (ALPH-) ALPHAGENE INC.
XX
PI   Valenzuela D,  Yuan O,  Hoffman H,  Hall J,  Rapiejko P;
XX
DR   WPI; 2000-052801/04.
XX
PT   New polynucleotides encoding secreted human proteins, derived from human
PT   fetal brain, adult skin, adult brain, adult heart, adult thymus and adult
PT   aorta cDNA libraries.
XX
PS   Disclosure; Page 270; 282pp; English.
XX
CC   This invention describes novel human secreted proteins which are encoded
CC   by polynucleotides obtained from fetal brain, adult skin, adult brain,
CC   adult heart, adult thymus and adult aorta cDNA libraries. The
CC   polynucleotides and proteins are predicted to have biological activities
CC   which would make them suitable for treating, preventing or ameliorating
CC   medical conditions in humans and animals, although no supporting data is
CC   given. Suggested activities include nutritional activity, cytokine and
CC   cell proliferation/differentiation activity, immune stimulating (e.g. as
CC   vaccines) or suppressing activity, hematopoiesis regulating activity,
CC   tissue growth activity, activin/inhibin activity,
CC   chemotactic/chemokinetic activity, hemostatic and thrombolytic activity,
CC   receptor/ligand activity, anti-inflammatory activity, cadherin/tumor
CC   invasion suppressor activity, and tumor inhibition activity. The
CC   polynucleotides are also stated to be useful for gene therapy. AAZ43809-
CC   Z43840 represent DNA probes used to isolate the polynucleotides
CC   represented in AAZ43777-Z43808 which encode the secreted proteins
CC   represented in AAY50905-Y50947
XX
SQ   Sequence 19 BP; 6 A; 1 C; 10 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 9.1e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         34 AGGTAGGCAGGAGG 47
                  ||||||||||||||
Db          1 AGGTAGGCAGGAGG 14


RESULT 1264
AAA82617
ID   AAA82617 standard; DNA; 19 BP.
XX
AC   AAA82617;
XX
DT   04-DEC-2000  (first entry)
XX
DE   cdk2 ribozyme binding site #54.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US028772.
XX
PR   04-DEC-1998;   98US-0110954P.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1.
XX
PS   Disclosure; Page 49; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells. The
CC   ribozyme is resistant to endonuclease activity and hence is efficient in
CC   restenosis treatment
XX
SQ   Sequence 19 BP; 2 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 9.1e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        922 CTGTTCCAGCTGCT 935
                ||||||||||||||
Db          6 CTGTTCCAGCTGCT 19


RESULT 1265
AAH57779
ID   AAH57779 standard; DNA; 19 BP.
XX
AC   AAH57779;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:203.
XX
KW   Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW   recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW   proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW   cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW   matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
```

KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 86; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnerary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 2 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 922 CTGTTCCAGCTGCT 935
||||||||||||||
Db 6 CTGTTCCAGCTGCT 19

RESULT 1266
ADF37430
ID ADF37430 standard; RNA; 19 BP.
XX
AC ADF37430;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human VEGFR3 short interfering nucleic acid (siNA) SEQ ID NO:1719.
XX
KW double-stranded short interfering nucleic acid;
KW short interfering nucleic acid; siNA; downregulation;
KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
KW cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
KW arthritis; psoriasis; endometriosis; angiofibroma;
KW polycystic kidney disease; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003070910-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US005022.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 29-MAY-2002; 2002WO-US017674.
PR 06-JUN-2002; 2002US-0386782P.
PR 03-JUL-2002; 2002US-0393796P.
PR 29-JUL-2002; 2002US-0399348P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 04-NOV-2002; 2002US-00287949.
PR 27-NOV-2002; 2002US-00306747.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Pavco P;
XX
DR WPI; 2003-679876/64.
XX
PT New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of cancer, downregulates the vascular endothelial growth
PT factor receptor gene.
XX
PS Example 3; SEQ ID NO 1719; 207pp; English.
XX
CC The present invention describes a double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the vascular
CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
CC that express siNA; and (5) single-stranded siNA with similar properties.
CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
CC gynaecological activities. The siNA are useful for modulating
CC (downregulating) the expression of VEGFR genes. The siNA are potentially
CC useful for treating a wide range of angiogenesis-associated conditions,
CC particularly cancers, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
CC drug screening, target identification and validation, genetic
CC engineering, studying gene function, and also for gene mapping (e.g. of
CC single-nucleotide polymorphisms). The present sequence is used in the
CC exemplification of the present invention.
XX
SQ Sequence 19 BP; 9 A; 3 C; 6 G; 0 T; 1 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 19;
Best Local Similarity 92.9%; Pred. No. 9.1e+02;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 180 AGGCATAGACAAGA 193
|||||:||||||||
Db 1 AGGCAUAGACAAGA 14

RESULT 1267
ADF37677/c
ID ADF37677 standard; RNA; 19 BP.

XX
AC ADF37677;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human VEGFR3 short interfering nucleic acid (siNA) SEQ ID NO:1966.
XX
KW double-stranded short interfering nucleic acid;
KW short interfering nucleic acid; siNA; downregulation;
KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
KW cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
KW arthritis; psoriasis; endometriosis; angiofibroma;
KW polycystic kidney disease; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003070910-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US005022.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 29-MAY-2002; 2002WO-US017674.
PR 06-JUN-2002; 2002US-0386782P.
PR 03-JUL-2002; 2002US-0393796P.
PR 29-JUL-2002; 2002US-0399348P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 04-NOV-2002; 2002US-00287949.
PR 27-NOV-2002; 2002US-00306747.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Pavco P;
XX
DR WPI; 2003-679876/64.
XX
PT New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of cancer, downregulates the vascular endothelial growth
PT factor receptor gene.
XX
PS Example 3; SEQ ID NO 1966; 207pp; English.
XX
CC The present invention describes a double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the vascular
CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
CC that express siNA; and (5) single-stranded siNA with similar properties.
CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
CC gynaecological activities. The siNA are useful for modulating
CC (downregulating) the expression of VEGFR genes. The siNA are potentially
CC useful for treating a wide range of angiogenesis-associated conditions,
CC particularly cancers, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
CC drug screening, target identification and validation, genetic
CC engineering, studying gene function, and also for gene mapping (e.g. of
CC single-nucleotide polymorphisms). The present sequence is used in the
CC exemplification of the present invention.
XX
SQ Sequence 19 BP; 1 A; 6 C; 3 G; 0 T; 9 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 180 AGGCATAGACAAGA 193
||||||||||||||
Db 19 AGGCATAGACAAGA 6

RESULT 1268
ADF70750
ID ADF70750 standard; DNA; 19 BP.
XX
AC ADF70750;
XX
DT 12-FEB-2004 (first entry)
XX
DE Hepatitis B virus PreS1 probe, SEQ ID 10.
XX
KW PreS1; HBV; probe; ss.
XX
OS Hepatitis B virus.
XX
PN JP2002355098-A.
XX
PD 10-DEC-2002.
XX
PF 14-AUG-2001; 2001JP-00246141.
XX
PR 14-AUG-2000; 2000JP-00245606.
XX
PA (GENO-) GENOME SCI KENKYUSHO KK.
XX
DR WPI; 2003-451644/43.
XX
PT Classification of genotype of hepatitis B viruses and primers and probes
PT for the method.
XX
PS Claim 3; Page 3; 13pp; Japanese.
XX
CC The present invention relates to a method for judging the genotype of
CC hepatitis B viruses (HBV) in which part of the gene sequence of the PreS1
CC region of HBV is amplified by PCR using labelled primers and the
CC amplified product is hybridized with HBV type A, B, C, D, E, F and G gene
CC -specific probes and the label in the PCR product is detected.
XX
SQ Sequence 19 BP; 9 A; 7 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 9.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1058 CAATCCCAACAAAG 1071
||||||||||||||
Db 6 CAATCCCAACAAAG 19

RESULT 1269
AAX80149/c
ID AAX80149 standard; DNA; 20 BP.
XX
AC AAX80149;
XX
DT 17-AUG-1999 (first entry)
XX
DE Clostridium histolyticum collagenase PCR primer #1.
XX
KW Clostridium histolyticum; collagenase; enzymatically active; cleavage;
KW fusion protein; PCR primer; ss.
XX
OS Synthetic.
OS Clostridium histolyticum.
XX
PN JP11137256-A.
XX

PD 25-MAY-1999.
XX
PF 12-NOV-1997; 97JP-00310887.
XX
PR 12-NOV-1997; 97JP-00310887.
XX
PA (SEGK) SEIKAGAKU KOGYO CO LTD.
XX
DR WPI; 1999-374377/32.
XX
PT New enzymatically active polypeptide and kit containing it - useful for
PT cleaving fusion proteins.
XX
PS Example 1; Page 15; 16pp; Japanese.
XX
CC The present invention describes an enzymatically active polypeptide (I)
CC derived from a Clostridium histolyticum collagenase with its collagen-
CC combining region deleted which specifically recognizes a peptide with the
CC sequence PLGP, and which cleaves the peptide by hydrolysing the peptide
CC bond on C-terminal side of the leucine residue of this sequence and which
CC does not decompose water-insoluble type I collagen. The present sequence
CC represents a PCR primer used in an example from the present invention
XX
SQ Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1527 TCAGCTACAAAAGG 1540
||||||||||||||
Db 17 TCAGCTACAAAAGG 4

RESULT 1270
AAI99916/c
ID AAI99916 standard; DNA; 20 BP.
XX
AC AAI99916;
XX
DT 18-FEB-2002 (first entry)
XX
DE Human alpha-2BAR genotyping PCR primer SEQ ID NO 22.
XX
KW Human; genotyping; alpha-2B; alpha-2A; alpha-2C; adrenergic receptor;
KW polymorphic site; allelic variant; cardiovascular disease;
KW central nervous system disease; adenylyl cyclase; MAP kinase activity;
KW phosphorylation; inositol phosphate; alpha-2BAR; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200179561-A2.
XX
PD 25-OCT-2001.
XX
PF 17-APR-2001; 2001WO-US012575.
XX
PR 17-APR-2000; 2000US-00551744.
PR 10-AUG-2000; 2000US-00636259.
PR 19-OCT-2000; 2000US-00692077.
XX
PA (LIGG/) LIGGETT S B.
PA (SMAL/) SMALL K M.
XX
PI Liggett SB, Small KM;
XX
DR WPI; 2001-611728/70.
XX
PT Genotyping an alpha-2B, 2A, or 2C adrenergic receptor gene useful for
PT determining whether an individual is at increased risk of developing a
PT disease associated with the corresponding receptor comprises detecting a
PT polymorphic site.
XX
PS Claim 10; Page 112; 163pp; English.
XX
CC The invention relates to genotyping an alpha-2B, 2A, or 2C adrenergic
CC receptor gene (I)-(III) by detecting a polymorphic site, comprising; (a)
CC obtaining a sample having a polynucleotide encoding an alpha-2B, alpha2A
CC or alpha2C or fragment or complement of; and (b) detecting a polymorphic
CC site comprising nucleotide positions 901-909 of (I), a site comprising
CC cytosine or guanine at position 753 of (IIV) or a site comprising (A)
CC (ggggcggggccg) or (B) (ggggcggctgag) at positions 961-972 of (III). The
CC method may be used for genotyping an alpha2B, alpha2A or alpha2C receptor
CC gene and further used to determine whether an individual is at increased
CC risk of developing a disease associated with alpha2B, alpha2A or alpha2,
CC comprising detecting a polymorphic site which correlate to disease
CC selected from cardiovascular disease, central nervous system disease and
CC combinations of these. In addition, the technique may be used to predict
CC an individual's response to an alpha2B, alpha2A, or alpha2C agonist (e.g.
CC epinephrine, norepinephrine, clonidine, oxymetazoline, guanabenz,
CC UK14304, BHT933 and combinations of these) or antagonist (e.g. yohimbine,
CC prazosin, ARC 239, rauwolscine, idazoxan, tolazoline, phentolamine and
CC combinations of these) by detecting the polymorphic site and correlating
CC the site to a predetermined response (where the response is correlated to
CC adenylyl cyclase, MAP kinase activity, phosphorylation or inositol
CC phosphate levels). The present sequence is that of a human alpha-2BAR PCR
CC primer, useful for the genotyping methods of the invention
XX
SQ Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1252 ATCTTAGGAACCCC 1265
||||||||||||||
Db 17 ATCTTAGGAACCCC 4

RESULT 1271
AAC88715
ID AAC88715 standard; DNA; 20 BP.
XX
AC AAC88715;
XX
DT 07-MAR-2001 (first entry)
XX
DE Human catenin-binding zinc finger protein PCR primer FVR463F.
XX
KW Catenin-binding zinc finger protein; cancer; neurological disorder;
KW drug screening; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN EP1054059-A1.
XX
PD 22-NOV-2000.
XX
PF 17-MAY-1999; 99EP-00201543.
XX
PR 17-MAY-1999; 99EP-00201543.
XX
PA (VLAA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.
XX
PI Van Roy F, Vanlandschoot A, Janssens B;
XX
DR WPI; 2001-033776/05.
XX
PT Nucleic acid or its fragments, useful for diagnosing and treating cancer
PT and neurological disorders, corresponds to a catenin-binding protein in
PT signal transduction and gene regulatory pathways.
XX
PS Disclosure; Page 17; 71pp; English.
XX
CC The present invention is related to the coding sequence and protein
CC fragments of a human catenin-binding zinc finger protein. The coding

```
CC   sequence was isolated from a human kidney cDNA library, but is expressed
CC   in most human tissue. The sequences provided by the invention can be used
CC   in the diagnosis and treatment of cancer and neurological disorders, and
CC   in drug screening to identify compounds capable of the same
XX
SQ   Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        877 GATGACTGTGGGAA 890
              ||||||||||||||
Db          2 GATGACTGTGGGAA 15


RESULT 1272
AAC88704
ID   AAC88704 standard; DNA; 20 BP.
XX
AC   AAC88704;
XX
DT   07-MAR-2001  (first entry)
XX
DE   Human catenin-binding zinc finger protein PCR primer FVR293F.
XX
KW   Catenin-binding zinc finger protein; cancer; neurological disorder;
KW   drug screening; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   EP1054059-A1.
XX
PD   22-NOV-2000.
XX
PF   17-MAY-1999;   99EP-00201543.
XX
PR   17-MAY-1999;   99EP-00201543.
XX
PA   (VLAA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.
XX
PI   Van Roy F,  Vanlandschoot A,  Janssens B;
XX
DR   WPI; 2001-033776/05.
XX
PT   Nucleic acid or its fragments, useful for diagnosing and treating cancer
PT   and neurological disorders, corresponds to a catenin-binding protein in
PT   signal transduction and gene regulatory pathways.
XX
PS   Disclosure; Page 17; 71pp; English.
XX
CC   The present invention is related to the coding sequence and protein
CC   fragments of a human catenin-binding zinc finger protein. The coding
CC   sequence was isolated from a human kidney cDNA library, but is expressed
CC   in most human tissue. The sequences provided by the invention can be used
CC   in the diagnosis and treatment of cancer and neurological disorders, and
CC   in drug screening to identify compounds capable of the same
XX
SQ   Sequence 20 BP; 5 A; 1 C; 8 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        877 GATGACTGTGGGAA 890
              ||||||||||||||
Db          5 GATGACTGTGGGAA 18


RESULT 1273
AAD12630
ID   AAD12630 standard; DNA; 20 BP.
XX
AC   AAD12630;
XX
DT   25-SEP-2001  (first entry)
XX
DE   Human ANC_2H01 cDNA sequencing forward primer, FVR463F.
XX
KW   Human; ANC_2H01 protein; catenin-binding protein; signal transduction;
KW   gene regulation; zinc finger protein; alphaN-catenin; drug screening;
KW   therapy; cancer; neurological disorder; cytostatic; neuroprotective;
KW   primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200147954-A2.
XX
PD   05-JUL-2001.
XX
PF   18-MAY-2000; 2000WO-EP004535.
XX
PR   23-DEC-1999;   99EP-00204512.
XX
PA   (VLAA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.
XX
PI   Van Roy F,  Vanlandschoot A,  Janssens B;
XX
DR   WPI; 2001-418220/44.
XX
PT   Novel recombinant nucleic acids useful for diagnosing, prognosing and/or
PT   treating cancer and neurological disorders, corresponds to a protein
PT   binding to alpha-catenin protein and with signal transduction function.
XX
PS   Disclosure; Page 66; 160pp; English.
XX
CC   The invention relates to human catenin-binding proteins and their
CC   corresponding cDNA molecules which functions in signal transduction and
CC   gene regulatory pathways. The invention also provides an isolated and/or
CC   recombinant nucleic acid or its functional fragment, homologue or
CC   derivative, corresponding to a alpha-catenin binding protein. The
CC   invention also relates to a novel human zinc finger protein binding with
CC   a member of the a-catulin/vinculin family, preferably with a human
CC   isoform of alpha N-catenin (neural form). The invention also relates to
CC   the field of drug discovery, diagnosis, prognosis and treatment of cancer
CC   and neurological disorders. The present sequence is a primer which is
CC   used for sequencing human ANC_2H01 cDNA
XX
SQ   Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        877 GATGACTGTGGGAA 890
              ||||||||||||||
Db          2 GATGACTGTGGGAA 15


RESULT 1274
AAD12619
ID   AAD12619 standard; DNA; 20 BP.
XX
AC   AAD12619;
XX
DT   25-SEP-2001  (first entry)
XX
DE   Human ANC_2H01 cDNA sequencing forward primer, FVR293F.
XX
KW   Human; ANC_2H01 protein; catenin-binding protein; signal transduction;
KW   gene regulation; zinc finger protein; alphaN-catenin; drug screening;
KW   therapy; cancer; neurological disorder; cytostatic; neuroprotective;
KW   primer; ss.
XX
OS   Homo sapiens.
XX
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PN WO200147954-A2.
XX
PD 05-JUL-2001.
XX
PF 18-MAY-2000; 2000WO-EP004535.
XX
PR 23-DEC-1999; 99EP-00204512.
XX
PA (VLAA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.
XX
PI Van Roy F, Vanlandschoot A, Janssens B;
XX
DR WPI; 2001-418220/44.
XX
PT Novel recombinant nucleic acids useful for diagnosing, prognosing and/or
PT treating cancer and neurological disorders, corresponds to a protein
PT binding to alpha-catenin protein and with signal transduction function.
XX
PS Disclosure; Page 66; 160pp; English.
XX
CC The invention relates to human catenin-binding proteins and their
CC corresponding cDNA molecules which functions in signal transduction and
CC gene regulatory pathways. The invention also provides an isolated and/or
CC recombinant nucleic acid or its functional fragment, homologue or
CC derivative, corresponding to a alpha-catenin binding protein. The
CC invention also relates to a novel human zinc finger protein binding with
CC a member of the a-catulin/vinculin family, preferably with a human
CC isoform of alpha N-catenin (neural form). The invention also relates to
CC the field of drug discovery, diagnosis, prognosis and treatment of cancer
CC and neurological disorders. The present sequence is a primer which is
CC used for sequencing human ANC_2H01 cDNA
XX
SQ Sequence 20 BP; 5 A; 1 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 877 GATGACTGTGGGAA 890
||||||||||||||
Db 5 GATGACTGTGGGAA 18

RESULT 1275
ABZ22802/c
ID ABZ22802 standard; DNA; 20 BP.
XX
AC ABZ22802;
XX
DT 02-APR-2003 (first entry)
XX
DE Human heparanase phosphorothioate oligonucleotide SEQ ID NO:3.
XX
KW Human; heparanase; phosphorothioate; antisense oligonucleotide;
KW cytostatic; gene therapy; tumour; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages"
XX
PN WO2003004705-A1.
XX
PD 16-JAN-2003.
XX
PF 01-JUL-2002; 2002WO-US020636.
XX
PR 05-JUL-2001; 2001US-00899440.
XX
PA (UYCO) UNIV COLUMBIA NEW YORK.
XX
PI Stein C;
XX
DR WPI; 2003-201558/19.
XX
PT New oligonucleotide having a sequence complementary to a sequence of
PT ribonucleic acid encoding a heparanase, useful for preparing a
PT composition for treating tumor.
XX
PS Claim 7; Page 32; 48pp; English.
XX
CC The present invention describes an oligonucleotide having a sequence
CC complementary to a sequence of ribonucleic acid encoding a heparanase.
CC The oligonucleotide hybridises with the ribonucleic acid under conditions
CC of high stringency and has a sequence comprising 10-40 bp. The
CC internucleoside linkages of the oligonucleotide comprise at least one
CC phosphorothioate linkage. Hybridisation of the oligonucleotide to the
CC ribonucleic acid inhibits expression of the heparanase, where inhibition
CC of heparanase means at least a 50% reduction in the quality of
CC heparanase. Also described: (1) a method of inhibiting expression of a
CC heparanase in a cell; (2) a composition comprising the above
CC oligonucleotide in an amount effective to inhibit the expression of
CC heparanase in the cell and a carrier; and (3) a method of treating a
CC tumour in a subject comprises administering to the subject an amount of
CC the above oligonucleotide effective to inhibit expression of a heparanase
CC in the subject. Heparanase antisense oligonucleotides have cytostatic
CC activity, can be used in gene therapy, and can be used for preparing a
CC composition for treating tumours. The present sequence represents a human
CC heparanase phosphorothioate antisense oligonucleotide, which is used in
CC the exemplification of the present invention
XX
SQ Sequence 20 BP; 6 A; 8 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 273 TGCTGCTCCTGGGG 286
||||||||||||||
Db 14 TGCTGCTCCTGGGG 1

RESULT 1276
ACC86848/c
ID ACC86848 standard; DNA; 20 BP.
XX
AC ACC86848;
XX
DT 04-AUG-2003 (first entry)
XX
DE Mouse VEGFR-1 chimeric phosphorothioate oligonucleotide SEQ ID NO:143.
XX
KW Vascular endothelial growth factor receptor 1; VEGF receptor; VEGFR;
KW inhibitor; cytostatic; antirheumatic; antiarthritic; antiangiogenic;
KW antiinflammatory; antisense gene therapy; hyperproliferative disorder;
KW cancer; rheumatoid arthritis; angiogenesis; infection; inflammation;
KW tumour formation; phosphorothioate; 2'-O-methoxyethyl; 2'-MOE; ss.
XX
OS Mus musculus.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-O-methoxyethyl (2'-MOE) wings at the 5'
FT and 3' ends, which are 5 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX
PN WO2003022227-A2.
XX

PD 20-MAR-2003.
XX
PF 12-SEP-2002; 2002WO-US029148.
XX
PR 13-SEP-2001; 2001US-00953318.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Watt AT;
XX
DR WPI; 2003-301004/29.
XX
PT New antisense oligonucleotide targeted to a nucleic acid encoding
PT vascular endothelial growth factor receptor-1, useful for diagnosing or
PT treating cancer, rheumatoid arthritis, or diseases or conditions
PT involving angiogenesis.
XX
PS Claim 3; Page 86; 150pp; English.
XX
CC The present invention describes a compound (C) 8-50 nucleobases in length
CC targeted to a nucleic acid molecule encoding vascular endothelial growth
CC factor receptor-1 (VEGFR-1), where the compound inhibits the expression
CC of VEGFR-1 and specifically hybridises with the nucleic acid encoding
CC VEGFR-1 or with an 8-nucleobase portion of an active site on the nucleic
CC acid molecule encoding VEGFR-1. Also described: (1) a composition
CC comprising (C) and a carrier or diluent; (2) inhibiting the expression of
CC VEGFR-1 in cells or tissues by contacting the cells or tissues with (C)
CC so that the expression of VEGFR-1 is inhibited; and (3) treating an
CC animal having a disease or condition associated with VEGFR-1 by
CC administering (C) to the animal so that the expression of VEGFR-1 is
CC inhibited. (C) has antiangiogenic, antirheumatic, antiarthritic,
CC cytostatic and antiinflammatory activities, and can be used in antisense
CC gene therapy. The antisense compounds are useful for modulating the
CC expression of VEGFR-1 and for treating diseases or conditions associated
CC with the expression of VEGFR-1, such as hyperproliferative disorders
CC (e.g. cancer), rheumatoid arthritis, or diseases or conditions involving
CC angiogenesis. The antisense compounds are also useful for diagnostics,
CC therapeutics, prophylaxis, e.g. to prevent or delay infection,
CC inflammation or tumour formation, as research reagents and kits, and in
CC distinguishing between functions of various members of a biological
CC pathway. The present sequence represents a mouse VEGFR-2 chimeric
CC phosphorothioate antisense oligonucleotide, which is used in an example
CC from the present invention
XX
SQ Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 539 CCATCTTTGACAAG 552
||||||||||||||
Db 18 CCATCTTTGACAAG 5

RESULT 1277
ABZ93277/c
ID ABZ93277 standard; DNA; 20 BP.
XX
AC ABZ93277;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 8519; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 6 A; 8 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1087 GTGGTGACACTGTG 1100
||||||||||||||
Db 14 GTGGTGACACTGTG 1

RESULT 1278
ABD29507/c
ID ABD29507 standard; DNA; 20 BP.
XX
AC ABD29507;
XX
DT 29-JUL-2004 (first entry)
XX
DE AA664176-derived oligonucleotide SEQ ID 8519.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.

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XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 8519; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 6 A; 8 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1087 GTGGTGACACTGTG 1100
              ||||||||||||||
Db         14 GTGGTGACACTGTG 1


RESULT 1279
ADJ34005/c
ID   ADJ34005 standard; DNA; 20 BP.
XX
AC   ADJ34005;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human polo-like kinase antisense oligonucleotide SEQ ID NO:65.
XX
KW   polo-like kinase; polo-like kinase inhibitor; antisense oligonucleotide;
KW   cytostatic; antiinflammatory; antimicrobial; antisense gene therapy;
KW   kinase inhibitor; hyperproliferative disorder; cancer;
KW   non-small cell lung cancer; oesophageal cancer; infection; inflammation;
KW   tumour; human; phosphorothioate; 2'-O-methoxyethyl; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "phosphorothioate linkages"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "2'-O-methoxyethyls"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'-O-methoxyethyls"
XX
PN   WO2004011610-A2.
XX
PD   05-FEB-2004.
XX
PF   25-JUL-2003; 2003WO-US023413.
XX
PR   30-JUL-2002; 2002US-00209405.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Wyatt JR,  Freier SM;
XX
DR   WPI; 2004-143840/14.
XX
PT   New antisense compounds targeted to nucleic acid molecules encoding polo-
PT   like kinase, useful for treating diseases associated with aberrant
PT   expression of polo-like kinase, e.g. non-small cell lung cancer or
PT   esophageal cancer.
XX
PS   Example 15; SEQ ID NO 65; 138pp; English.
XX
CC   The present invention describes a compound (I) of 8-80 nucleobases in
CC   length targeted to a nucleic acid molecule encoding polo-like kinase,
CC   where (I) specifically hybridises with nucleic acid molecule encoding
CC   polo-like kinase and inhibits the expression of polo-like kinase, or
CC   specifically hybridises with at least an 8-nucleobase portion of a
CC   preferred target region on a nucleic acid molecule encoding polo-like
CC   kinase. Also described: (1) a composition comprising (I) and a
CC   pharmaceutical carrier or diluent; (2) inhibiting the expression of polo-
CC   like kinase in cells or tissues comprising contacting the cells or
CC   tissues with (I); (3) treating an animal having a disease or condition
CC   associated with polo-like kinase comprising administering to the animal a
CC   therapeutic or prophylactic amount of (I) so that expression of polo-like
CC   kinase is inhibited; and (4) screening for an antisense compound
CC   comprising contacting a preferred target region of a nucleic acid
CC   molecule encoding polo-like kinase with one or more candidate antisense
CC   compounds comprising at least an 8-nucleobase portion which is
CC   complementary to the preferred target region, and selecting for one or
CC   more candidate antisense compounds which inhibits the expression of a
CC   nucleic acid molecule encoding polo-like kinase. (I) has cytostatic,
CC   antiinflammatory and antimicrobial activities, and can be used in
CC   antisense gene therapy, and as a kinase inhibitor. The antisense
CC   oligonucleotides or compounds (I) can be used for inhibiting the
CC   expression of polo-like kinase, and for treating diseases or conditions
CC   associated with aberrant expression of polo-like kinase, e.g.
CC   hyperproliferative disorder such as cancer, including non-small cell lung
```

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CC   cancer or oesophageal cancer. The antisense compounds are also useful as
CC   research reagents and kits, or in diagnostic, therapeutic and
CC   prophylactic applications, e.g. to prevent or delay infection,
CC   inflammation or tumour formation. The present sequence represents a human
CC   polo-like kinase chimeric phosphorothioate antisense oligonucleotide,
CC   which is used in an example from the present invention.
XX
SQ   Sequence 20 BP; 5 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        132 GATGAAGAAGATCA 145
              ||||||||||||||
Db         15 GATGAAGAAGATCA 2


RESULT 1280
ADL58295/c
ID   ADL58295 standard; DNA; 20 BP.
XX
AC   ADL58295;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Human ESM-1 antisense oligonucleotide seqid 544.
XX
KW   cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
KW   gene therapy; endothelial specific molecule-1; ESM-1;
KW   ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KW   angiogenic disorder; immunological disorder; cardiovascular disorder;
KW   neurological disorder; antisense technology; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "OTHER= phosphorothioate backbone. All cytidine
FT                    residues are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2004021978-A2.
XX
PD   18-MAR-2004.
XX
PF   19-AUG-2003; 2003WO-US025833.
XX
PR   19-AUG-2002; 2002US-0404495P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Weinstein EJ,  Griggs DW;
XX
DR   WPI; 2004-248358/23.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
PT   composition for treating e.g., diabetes, cancer or cardiovascular
PT   disorder.
XX
PS   Claim 3; SEQ ID NO 544; 555pp; English.
XX
CC   The invention describes a new antisense compound, having a sequence
CC   comprising 8-30 bp targeted to a nucleic acid encoding endothelial
CC   specific molecule-1 (ESM-1), that specifically hybridises with the
CC   nucleic acid ESM-1 and inhibits its expression. Also described are: a
CC   composition; inhibiting the expression of ESM-1 in cells or tissues; and
CC   treating an animal having a disease or condition associated with ESM-1.
CC   The compound is useful for preparing a composition for treating diabetes,
CC   cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
CC   cardiovascular or neurological disorder. This sequence represents an
CC   antisense oligonucleotide that can be used to modulate expression of
CC   endothelial specific molecule-1 (ESM-1).
XX
SQ   Sequence 20 BP; 8 A; 6 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        593 TTGGCTTTGGGAAA 606
              ||||||||||||||
Db         18 TTGGCTTTGGGAAA 5


RESULT 1281
ADL59105/c
ID   ADL59105 standard; DNA; 20 BP.
XX
AC   ADL59105;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Human ESM-1 antisense oligonucleotide seqid 1354.
XX
KW   cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
KW   gene therapy; endothelial specific molecule-1; ESM-1;
KW   ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KW   angiogenic disorder; immunological disorder; cardiovascular disorder;
KW   neurological disorder; antisense technology; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "OTHER= phosphorothioate backbone. All cytidine
FT                    residues are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2004021978-A2.
XX
PD   18-MAR-2004.
XX
PF   19-AUG-2003; 2003WO-US025833.
XX
PR   19-AUG-2002; 2002US-0404495P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Weinstein EJ,  Griggs DW;
XX
DR   WPI; 2004-248358/23.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
PT   composition for treating e.g., diabetes, cancer or cardiovascular
PT   disorder.
```

```
XX
PS   Claim 3; SEQ ID NO 1354; 555pp; English.
XX
CC   The invention describes a new antisense compound, having a sequence
CC   comprising 8-30 bp targeted to a nucleic acid encoding endothelial
CC   specific molecule-1 (ESM-1), that specifically hybridises with the
CC   nucleic acid ESM-1 and inhibits its expression. Also described are: a
CC   composition; inhibiting the expression of ESM-1 in cells or tissues; and
CC   treating an animal having a disease or condition associated with ESM-1.
CC   The compound is useful for preparing a composition for treating diabetes,
CC   cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
CC   cardiovascular or neurological disorder. This sequence represents an
CC   antisense oligonucleotide that can be used to modulate expression of
CC   endothelial specific molecule-1 (ESM-1).
XX
SQ   Sequence 20 BP; 11 A; 5 C; 1 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        593 TTGGCTTTGGGAAA 606
              ||||||||||||||
Db         14 TTGGCTTTGGGAAA 1


RESULT 1282
ADL58628/c
ID   ADL58628 standard; DNA; 20 BP.
XX
AC   ADL58628;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Human ESM-1 antisense oligonucleotide seqid 877.
XX
KW   cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
KW   gene therapy; endothelial specific molecule-1; ESM-1;
KW   ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KW   angiogenic disorder; immunological disorder; cardiovascular disorder;
KW   neurological disorder; antisense technology; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "OTHER= phosphorothioate backbone. All cytidine
FT                    residues are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2004021978-A2.
XX
PD   18-MAR-2004.
XX
PF   19-AUG-2003; 2003WO-US025833.
XX
PR   19-AUG-2002; 2002US-0404495P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Weinstein EJ,  Griggs DW;
XX
DR   WPI; 2004-248358/23.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
PT   composition for treating e.g., diabetes, cancer or cardiovascular
PT   disorder.
XX
PS   Claim 3; SEQ ID NO 877; 555pp; English.
XX
CC   The invention describes a new antisense compound, having a sequence
CC   comprising 8-30 bp targeted to a nucleic acid encoding endothelial
CC   specific molecule-1 (ESM-1), that specifically hybridises with the
CC   nucleic acid ESM-1 and inhibits its expression. Also described are: a
CC   composition; inhibiting the expression of ESM-1 in cells or tissues; and
CC   treating an animal having a disease or condition associated with ESM-1.
CC   The compound is useful for preparing a composition for treating diabetes,
CC   cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
CC   cardiovascular or neurological disorder. This sequence represents an
CC   antisense oligonucleotide that can be used to modulate expression of
CC   endothelial specific molecule-1 (ESM-1).
XX
SQ   Sequence 20 BP; 6 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        593 TTGGCTTTGGGAAA 606
              ||||||||||||||
Db         20 TTGGCTTTGGGAAA 7


RESULT 1283
ADL58665/c
ID   ADL58665 standard; DNA; 20 BP.
XX
AC   ADL58665;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Human ESM-1 antisense oligonucleotide seqid 914.
XX
KW   cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
KW   gene therapy; endothelial specific molecule-1; ESM-1;
KW   ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KW   angiogenic disorder; immunological disorder; cardiovascular disorder;
KW   neurological disorder; antisense technology; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "OTHER= phosphorothioate backbone. All cytidine
FT                    residues are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2004021978-A2.
XX
PD   18-MAR-2004.
XX
PF   19-AUG-2003; 2003WO-US025833.
XX
PR   19-AUG-2002; 2002US-0404495P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
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PI   Weinstein EJ,  Griggs DW;
XX
DR   WPI; 2004-248358/23.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
PT   composition for treating e.g., diabetes, cancer or cardiovascular
PT   disorder.
XX
PS   Claim 3; SEQ ID NO 914; 555pp; English.
XX
CC   The invention describes a new antisense compound, having a sequence
CC   comprising 8-30 bp targeted to a nucleic acid encoding endothelial
CC   specific molecule-1 (ESM-1), that specifically hybridises with the
CC   nucleic acid ESM-1 and inhibits its expression. Also described are: a
CC   composition; inhibiting the expression of ESM-1 in cells or tissues; and
CC   treating an animal having a disease or condition associated with ESM-1.
CC   The compound is useful for preparing a composition for treating diabetes,
CC   cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
CC   cardiovascular or neurological disorder. This sequence represents an
CC   antisense oligonucleotide that can be used to modulate expression of
CC   endothelial specific molecule-1 (ESM-1).
XX
SQ   Sequence 20 BP; 9 A; 6 C; 1 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        593 TTGGCTTTGGGAAA 606
              ||||||||||||||
Db         16 TTGGCTTTGGGAAA 3


RESULT 1284
ADL58424/c
ID   ADL58424 standard; DNA; 20 BP.
XX
AC   ADL58424;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Human ESM-1 antisense oligonucleotide seqid 673.
XX
KW   cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
KW   gene therapy; endothelial specific molecule-1; ESM-1;
KW   ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KW   angiogenic disorder; immunological disorder; cardiovascular disorder;
KW   neurological disorder; antisense technology; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "OTHER= phosphorothioate backbone. All cytidine
FT                    residues are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2004021978-A2.
XX
PD   18-MAR-2004.
XX
PF   19-AUG-2003; 2003WO-US025833.
XX
PR   19-AUG-2002; 2002US-0404495P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Weinstein EJ,  Griggs DW;
XX
DR   WPI; 2004-248358/23.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
PT   composition for treating e.g., diabetes, cancer or cardiovascular
PT   disorder.
XX
PS   Claim 3; SEQ ID NO 673; 555pp; English.
XX
CC   The invention describes a new antisense compound, having a sequence
CC   comprising 8-30 bp targeted to a nucleic acid encoding endothelial
CC   specific molecule-1 (ESM-1), that specifically hybridises with the
CC   nucleic acid ESM-1 and inhibits its expression. Also described are: a
CC   composition; inhibiting the expression of ESM-1 in cells or tissues; and
CC   treating an animal having a disease or condition associated with ESM-1.
CC   The compound is useful for preparing a composition for treating diabetes,
CC   cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
CC   cardiovascular or neurological disorder. This sequence represents an
CC   antisense oligonucleotide that can be used to modulate expression of
CC   endothelial specific molecule-1 (ESM-1).
XX
SQ   Sequence 20 BP; 9 A; 6 C; 1 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        593 TTGGCTTTGGGAAA 606
              ||||||||||||||
Db         17 TTGGCTTTGGGAAA 4


RESULT 1285
ADL58846/c
ID   ADL58846 standard; DNA; 20 BP.
XX
AC   ADL58846;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Human ESM-1 antisense oligonucleotide seqid 1095.
XX
KW   cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
KW   gene therapy; endothelial specific molecule-1; ESM-1;
KW   ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KW   angiogenic disorder; immunological disorder; cardiovascular disorder;
KW   neurological disorder; antisense technology; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "OTHER= phosphorothioate backbone. All cytidine
FT                    residues are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2004021978-A2.
XX
```

```
PD   18-MAR-2004.
XX
PF   19-AUG-2003; 2003WO-US025833.
XX
PR   19-AUG-2002; 2002US-0404495P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Weinstein EJ,  Griggs DW;
XX
DR   WPI; 2004-248358/23.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
PT   composition for treating e.g., diabetes, cancer or cardiovascular
PT   disorder.
XX
PS   Claim 3; SEQ ID NO 1095; 555pp; English.
XX
CC   The invention describes a new antisense compound, having a sequence
CC   comprising 8-30 bp targeted to a nucleic acid encoding endothelial
CC   specific molecule-1 (ESM-1), that specifically hybridises with the
CC   nucleic acid ESM-1 and inhibits its expression. Also described are: a
CC   composition; inhibiting the expression of ESM-1 in cells or tissues; and
CC   treating an animal having a disease or condition associated with ESM-1.
CC   The compound is useful for preparing a composition for treating diabetes,
CC   cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
CC   cardiovascular or neurological disorder. This sequence represents an
CC   antisense oligonucleotide that can be used to modulate expression of
CC   endothelial specific molecule-1 (ESM-1).
XX
SQ   Sequence 20 BP; 10 A; 5 C; 1 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        593 TTGGCTTTGGGAAA 606
              ||||||||||||||
Db         15 TTGGCTTTGGGAAA 2


RESULT 1286
ADL58847/c
ID   ADL58847 standard; DNA; 20 BP.
XX
AC   ADL58847;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Human ESM-1 antisense oligonucleotide seqid 1096.
XX
KW   cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective;
KW   gene therapy; endothelial specific molecule-1; ESM-1;
KW   ESM-1 related disorder; diabetes; cancer; ischaemia; reperfusion injury;
KW   angiogenic disorder; immunological disorder; cardiovascular disorder;
KW   neurological disorder; antisense technology; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "OTHER= phosphorothioate backbone. All cytidine
FT                    residues are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2004021978-A2.
XX
PD   18-MAR-2004.
XX
PF   19-AUG-2003; 2003WO-US025833.
XX
PR   19-AUG-2002; 2002US-0404495P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Weinstein EJ,  Griggs DW;
XX
DR   WPI; 2004-248358/23.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding endothelial specific molecule-1 (ESM-1), useful for preparing a
PT   composition for treating e.g., diabetes, cancer or cardiovascular
PT   disorder.
XX
PS   Claim 3; SEQ ID NO 1096; 555pp; English.
XX
CC   The invention describes a new antisense compound, having a sequence
CC   comprising 8-30 bp targeted to a nucleic acid encoding endothelial
CC   specific molecule-1 (ESM-1), that specifically hybridises with the
CC   nucleic acid ESM-1 and inhibits its expression. Also described are: a
CC   composition; inhibiting the expression of ESM-1 in cells or tissues; and
CC   treating an animal having a disease or condition associated with ESM-1.
CC   The compound is useful for preparing a composition for treating diabetes,
CC   cancer, ischaemia or reperfusion injury, or angiogenic, immunological,
CC   cardiovascular or neurological disorder. This sequence represents an
CC   antisense oligonucleotide that can be used to modulate expression of
CC   endothelial specific molecule-1 (ESM-1).
XX
SQ   Sequence 20 BP; 7 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        593 TTGGCTTTGGGAAA 606
              ||||||||||||||
Db         19 TTGGCTTTGGGAAA 6


RESULT 1287
ADO53802
ID   ADO53802 standard; DNA; 20 BP.
XX
AC   ADO53802;
XX
DT   15-JUL-2004  (first entry)
XX
DE   Farnesoid X receptor gene expression antisense inhibitory oligo #1175.
XX
KW   ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic;
KW   antiarteriosclerotic; hepatotropic; litholytic; anorectic;
KW   neuroprotective; vasotropic; antisense; gene therapy;
KW   Farnesoid X receptor; diabetes; immunological disorder;
KW   cardiovascular disorder; dyslipidemia; atherosclerosis;
KW   high density lipoprotein; low density lipoprotein; hypercholesterolemia;
KW   gallstones; hypertriglyceridemia; obesity; neurological disorder;
KW   ischemia; reperfusion; diagnostics; prophylaxis.
XX
OS   Homo sapiens.
XX
PN   WO2004030750-A1.
XX
PD   15-APR-2004.
XX
PF   25-SEP-2003; 2003WO-US030353.
XX
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PR 25-SEP-2002; 2002US-0413588P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Kane CD;
XX
DR WPI; 2004-347928/32.
XX
PT New antisense oligonucleotides useful for modulating expression of
PT Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,
PT e.g. diabetes, immunological disorders, cardiovascular disorders,
PT gallstones or obesity.
XX
PS Claim 4; SEQ ID NO 1175; 150pp; English.
XX
CC The invention relates to an antisense compound 8-30 nucleobases in length
CC targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),
CC where the antisense compound specifically hybridizes with and inhibits
CC the expression of FXR. The composition and methods are useful for
CC inhibiting the expression of FXR (Farnesoid X receptor) in cells or
CC tissues, or for treating diseases or conditions associated with FXR, such
CC as diabetes, immunological disorders, cardiovascular disorders, e.g.
CC dyslipidemia and its symptoms, atherosclerosis, low HDL (high density
CC lipoprotein), elevated LDL (low density lipoprotein) or
CC hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,
CC neurological disorders, or ischemia/reperfusion injury. In addition, the
CC composition is used for diagnostics, prophylaxis, or as research reagents
CC or kits. This sequence corresponds to an antisense oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1658 ACACCCCTCACAGG 1671
||||||||||||||
Db 6 ACACCCCTCACAGG 19

RESULT 1288
ADO53870
ID ADO53870 standard; DNA; 20 BP.
XX
AC ADO53870;
XX
DT 15-JUL-2004 (first entry)
XX
DE Farnesoid X receptor gene expression antisense inhibitory oligo #1243.
XX
KW ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic;
KW antiarteriosclerotic; hepatotropic; litholytic; anorectic;
KW neuroprotective; vasotropic; antisense; gene therapy;
KW Farnesoid X receptor; diabetes; immunological disorder;
KW cardiovascular disorder; dyslipidemia; atherosclerosis;
KW high density lipoprotein; low density lipoprotein; hypercholesterolemia;
KW gallstones; hypertriglyceridemia; obesity; neurological disorder;
KW ischemia; reperfusion; diagnostics; prophylaxis.
XX
OS Homo sapiens.
XX
PN WO2004030750-A1.
XX
PD 15-APR-2004.
XX
PF 25-SEP-2003; 2003WO-US030353.
XX
PR 25-SEP-2002; 2002US-0413588P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Kane CD;
XX
DR WPI; 2004-347928/32.
XX
PT New antisense oligonucleotides useful for modulating expression of
PT Farnesoid X Receptor (FXR) or for treating diseases associated with FXR,
PT e.g. diabetes, immunological disorders, cardiovascular disorders,
PT gallstones or obesity.
XX
PS Claim 4; SEQ ID NO 1243; 150pp; English.
XX
CC The invention relates to an antisense compound 8-30 nucleobases in length
CC targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR),
CC where the antisense compound specifically hybridizes with and inhibits
CC the expression of FXR. The composition and methods are useful for
CC inhibiting the expression of FXR (Farnesoid X receptor) in cells or
CC tissues, or for treating diseases or conditions associated with FXR, such
CC as diabetes, immunological disorders, cardiovascular disorders, e.g.
CC dyslipidemia and its symptoms, atherosclerosis, low HDL (high density
CC lipoprotein), elevated LDL (low density lipoprotein) or
CC hypercholesterolemia, gallstones, hypertriglyceridemia, obesity,
CC neurological disorders, or ischemia/reperfusion injury. In addition, the
CC composition is used for diagnostics, prophylaxis, or as research reagents
CC or kits. This sequence corresponds to an antisense oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 5 A; 9 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1658 ACACCCCTCACAGG 1671
||||||||||||||
Db 7 ACACCCCTCACAGG 20

RESULT 1289
ADP26777/c
ID ADP26777 standard; DNA; 20 BP.
XX
AC ADP26777;
XX
DT 26-AUG-2004 (first entry)
XX
DE Human Ephrin-B2 DNA antisense oligonucleotide #14.
XX
KW Human; Ephrin-B2; ss; antisense oligonucleotide;
KW phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004110150-A1.
XX
PD 10-JUN-2004.
XX
PF 10-DEC-2002; 2002US-00316516.
XX
PR 10-DEC-2002; 2002US-00316516.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Koller E, Dobie KW;
XX
DR WPI; 2004-440339/41.
XX
PT New oligonucleotide compound that inhibits expression of Ephrin-B2,
PT useful for preparing a composition for treating hyperproliferative
PT disorder, e.g. cancer.
XX
PS Example 15; SEQ ID NO 26; 69pp; English.
XX
CC The invention relates to a compound targeted to a nucleic acid molecule

```
CC   encoding the human Ephrin-B2 polypeptide. The compound is an antisense
CC   oligonucleotide that specifically hybridises with the nucleic acid and
CC   inhibits expression of the polypeptide. The antisense oligonucleotide
CC   comprises at least one modified internucleoside linkage i.e. a
CC   phosphorothioate linkage, at least one modified sugar moiety, preferably
CC   a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC   comprising a 5-methylcytosine. The antisense compounds are useful for
CC   modulating the expression of the human Ephrin-B2 polypeptide and in
CC   preparation of a composition for treating hyperproliferative disorders,
CC   e.g. cancer. This sequence represents an antisense oligonucleotide
CC   targeted to DNA encoding the human Ephrin-B2 polypeptide of the
CC   invention.
XX
SQ   Sequence 20 BP; 5 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 9.5e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        847 TACCTGGACAAGGA 860
              ||||||||||||||
Db         14 TACCTGGACAAGGA 1


RESULT 1290
AAX09162
ID   AAX09162 standard; DNA; 21 BP.
XX
AC   AAX09162;
XX
DT   24-MAR-1999  (first entry)
XX
DE   Human biallelic polymorphic marker upstream primer #42.
XX
KW   Polymorphism; biallelic; human; forensic; paternity testing; disease;
KW   detection; phenotypic typing; characteristic; infection; hereditary;
KW   autoimmune disease; cancer; inflammation; drug; therapy; medicament;
KW   treatment; marker; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9820165-A2.
XX
PD   14-MAY-1998.
XX
PF   05-NOV-1997;   97WO-US020313.
XX
PR   06-NOV-1996;   96US-0030455P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   Lander ES,  Wang D,  Hudson T;
XX
DR   WPI; 1998-286974/25.
XX
PT   New isolated nucleic acid segments from the human genome - used for
PT   determining polymorphic forms for use in e.g. forensics, paternity
PT   testing or phenotypic typing for disease.
XX
PS   Claim 15; Page 51; 310pp; English.
XX
CC   AAX09121-X10268 are allele-specific oligonucleotide primers used in the
CC   isolation of various biallelic polymorphic markers found in the human
CC   genome (represented in AAX10269-X12937). These primers can be used in a
CC   method for determining polymorphic forms in an individual for use in e.g.
CC   forensics, paternity testing or for phenotypic typing for diseases such
CC   as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC   dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
CC   hypercholesterolemia, polycystic kidney disease, hereditary
CC   spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
CC   haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
CC   syndrome, osteogenesis imperfecta, acute intermittent porphyria,
CC   autoimmune diseases, inflammation, cancer, diseases of the nervous
CC   system, infection by pathogenic microorganisms, and characteristics such
CC   as longevity, appearance (e.g. baldness, obesity), strength, speed,
CC   endurance, fertility, and susceptibility or receptivity to particular
CC   drugs or therapeutic treatments. The isolated polymorphic nucleic acid
CC   segments can also be used to produce medicaments for the treatment or
CC   prophylaxis of such diseases
XX
SQ   Sequence 21 BP; 7 A; 4 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 14;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        714 ACTGGAACATGAAG 727
              ||||||||||||||
Db          4 ACTGGAACATGAAG 17


RESULT 1291
AAV08201
ID   AAV08201 standard; DNA; 21 BP.
XX
AC   AAV08201;
XX
DT   27-JAN-1999  (first entry)
XX
DE   PCR primer ABCR.EXON7:F for ABCR coding sequence.
XX
KW   ATP binding cassette; ABC transporter; ABCR; Stargardt Disease; therapy;
KW   Fundus Flavimaculatus; age-related macular degeneration; diagnosis;
KW   PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9837764-A1.
XX
PD   03-SEP-1998.
XX
PF   27-FEB-1998;   98WO-US003895.
XX
PR   27-FEB-1997;   97US-0039388P.
XX
PA   (BAYU ) BAYLOR COLLEGE MEDICINE.
PA   (UYJO ) UNIV JOHNS HOPKINS.
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PA   (UTAH ) UNIV UTAH.
XX
PI   Allikmets R,  Anderson KL,  Dean M,  Leppart M,  Lewis RA,  Li Y;
PI   Lupski JR,  Nathans J,  Rattner A,  Shroyer NF,  Singh N,  Smallwood PM;
PI   Sun H;
XX
DR   WPI; 1998-495375/42.
XX
PT   Retina-specific ATP-binding cassette transporter and DNA - useful for,
PT   e.g. diagnosis and treatment of macular degeneration, such as in
PT   Stargardt Disease, Fundus Flavimaculatus and age-related degeneration.
XX
PS   Claim 41; Page 27; 79pp; English.
XX
CC   This sequence represents a PCR primer for DNA encoding the human retina
CC   specific ATP binding cassette transporter (ABCR) of the invention. ABCR
CC   may be used in compositions for screening agents that alters ABCR. The
CC   agent can inhibit Stargardt Disease, Fundus Flavimaculatus and age-
CC   related macular degeneration (MD). Primers (such as this sequence) and
CC   probes for the ABCR DNA can be used in a diagnostic kit for detecting MD
XX
SQ   Sequence 21 BP; 8 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 14;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy        704 AGGAGATCAGACTG 717
              ||||||||||||||
Db          8 AGGAGATCAGACTG 21
```

```
RESULT 1292
AAX35653/c
ID   AAX35653 standard; DNA; 21 BP.
XX
AC   AAX35653;
XX
DT   09-JUL-1999  (first entry)
XX
DE   PCR primer used to amplify human heparanase cDNA.
XX
KW   Heparanase; hpa; modulator; heparin-binding growth factor;
KW   cellular response; cytokine; cell interaction; plasma lipoprotein;
KW   cellular susceptibility; infection; disintegration;
KW   neurodegenerative plaque; wound healing; angiogenesis; restenosis;
KW   atherscleros is; inflammation; neurodegenerative disease; neutralise;
KW   plasma heparin; micrometastasis; autoimmune lesion; renal failure;
KW   PCR primer; ss.
XX
OS   Synthetic.
XX
PN   WO9911798-A1.
XX
PD   11-MAR-1999.
XX
PF   31-AUG-1998;   98WO-US017954.
XX
PR   02-SEP-1997;   97US-00922170.
PR   02-JUL-1998;   98US-00109386.
XX
PA   (INSI-) INSIGHT STRATEGY & MARKETING LTD.
PA   (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
PA   (FRIE/) FRIEDMAN M M.
XX
PI   Pecker I,  Vlodavsky I,  Feinstein E;
XX
DR   WPI; 1999-302255/25.
XX
PT   New human polynucleotide useful for treating angiogenesis, restenosis,
PT   and inflammation.
XX
PS   Example 7; Page 30; 63pp; English.
XX
CC   The specification describes a polypeptide having heparanase (hpa)
CC   activity. The recombinant protein is used as a modulator of heparin-
CC   binding growth factors, cellular responses to heparin-binding growth
CC   factors and cytokines, cell interaction with plasma lipoproteins,
CC   cellular susceptibility to viral, protozoal and bacterial infections or
CC   disintegration of neurodegenerative plaques. Heparanase may be useful for
CC   conditions such as wound healing, angiogenesis, restenosis,
CC   atherscleros is, inflammation, neurodegenerative diseases, and viral
CC   infections. Mammalian heparanase can be used to neutralize plasma
CC   heparin, and anti-heparanase antibodies may be applied for
CC   immunodetection and diagnosis of micrometastases, autoimmune lesions, and
CC   renal failure in biopsy specimens, plasma samples, and body fluids. The
CC   present PCR primer was used to amplify hpa cDNA, in the course of the
CC   invention
XX
SQ   Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        273 TGCTGCTCCTGGGG 286
              ||||||||||||||
Db         14 TGCTGCTCCTGGGG 1
```

```
RESULT 1293
AAA75055/c
ID   AAA75055 standard; DNA; 21 BP.
XX
AC   AAA75055;
XX
DT   15-JAN-2001  (first entry)
XX
DE   PCR primer hpl-629 used to amplify human cDNA encoding heparanase.
XX
KW   Human; heparanase; gene therapy; tumour; inflammation; autoimmunity;
KW   heparin-binding growth factor; cytokine; neurodegenerative plaque;
KW   wound healing; infection; burn; angiogenesis; restenosis;
KW   atherosclerosis; inflammation; neurodegenerative disease;
KW   Gerstmann-Straussler Syndrome; Creutzfeldt-Jakob disease; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200052178-A1.
XX
PD   08-SEP-2000.
XX
PF   14-FEB-2000; 2000WO-US003542.
XX
PR   01-MAR-1999;   99US-00258892.
XX
PA   (INSI-) INSIGHT STRATEGY & MARKETING LTD.
PA   (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
PA   (FRIE/) FRIEDMAN M M.
XX
PI   Pecker I,  Vlodavsky I,  Feinstein E;
XX
DR   WPI; 2000-579289/54.
XX
PT   New polynucleotides encoding a polypeptide having heparanase activity,
PT   useful in wound healing and in gene therapy, particularly in treating
PT   tumor, inflammation, autoimmunity, neurodegenerative diseases.
XX
PS   Example 6; Page 53; 152pp; English.
XX
CC   The present PCR primer was used to amplify a human cDNA sequence, which
CC   encoded a protein with heparanase catalytic activity. The heparanase
CC   (hpa) polynucleotide is useful in gene therapy, particularly in treating
CC   tumour, inflammation or autoimmunity. Particularly, the polynucleotide is
CC   useful in modulating the bioavailability of heparin-binding growth
CC   factors, cellular responses to heparin-binding growth factors (e.g. bFGF)
CC   and cytokines (e.g. interleukin (IL)-8), cell interaction with plasma
CC   lipoproteins, cellular susceptibility to certain viral and some bacterial
CC   and protozoa infections, or disintegration of neurodegenerative plaques.
CC   The polynucleotide is also useful in wound healing (e.g. thermal,
CC   chemical or radiation burns), and in the treatment of angiogenesis,
CC   restenosis, atherosclerosis, inflammation, neurodegenerative diseases
CC   (Gerstmann-Straussler Syndrome or Creutzfeldt-Jakob disease), and some
CC   viral, bacterial or protozoa infections
XX
SQ   Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        273 TGCTGCTCCTGGGG 286
              ||||||||||||||
Db         14 TGCTGCTCCTGGGG 1
```

```
RESULT 1294
AAH28645
ID   AAH28645 standard; DNA; 21 BP.
XX
AC   AAH28645;
XX
```

DT 17-JUL-2001 (first entry)
XX
DE Human interleukin-13 coding sequence fragment PCR primer #20.
XX
KW Human; interleukin-13; IL13; single nucleotide polymorphism; SNP; cancer;
KW inflammation; immune disorder; cytokine; asthma; chromosome 5q31;
KW fibrosis; forensic; disease susceptibility; drug screening; PCR primer;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200123410-A2.
XX
PD 05-APR-2001.
XX
PF 27-SEP-2000; 2000WO-US026556.
XX
PR 28-SEP-1999; 99US-0156489P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Chew A, Denton RR, Nandabalan K, Stephens JC;
XX
DR WPI; 2001-343160/36.
XX
PT Novel polynucleotide comprising single nucleotide polymorphisms in human
PT interleukin-13 gene is useful for studying expression and function of
PT interleukin-13, as well as diagnosing and treating cancer, inflammatory,
PT and immune disorders.
XX
PS Example 1; Page 32; 85pp; English.
XX
CC The present invention provides the protein, cDNA and genomic sequences of
CC human interleukin-13 (IL13), and describes the single nucleotide
CC polymorphisms (SNPs) found within the gene, which is found on chromosome
CC 5q31. IL13 is a pro-inflammatory cytokine thought to be involved in the
CC pathogenesis of asthma and other immune and inflammatory diseases. The
CC IL13 sequences and the SNPs identified can be used in drug screening, to
CC determine an individual's susceptibility to disease, in forensic and
CC paternity testing, and to identify treatments for cancer, immune and
CC inflammatory diseases, including asthma and diseases characterised by
CC fibrosis. The present sequence is an IL13 fragment PCR primer
XX
SQ Sequence 21 BP; 5 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.8e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 843 TGAGTACCTGGACA 856
||||||||||||||
Db 5 TGAGTACCTGGACA 18

RESULT 1295
ABL53717
ID ABL53717 standard; DNA; 21 BP.
XX
AC ABL53717;
XX
DT 24-JUN-2002 (first entry)
XX
DE PGK1 PCR primer oVT201.
XX
KW Gene identification; cell proliferation; cancer; arteriosclerosis;
KW psoriasis; rheumatoid arthritis; restenosis; gene therapy; cytostatic;
KW antiarteriosclerotic; antipsoriatic; antiarthritic; antirheumatic;
KW vasotropic; diagnosis; perturbagen; PGK1; PCR; primer; ss.
XX
OS Saccharomyces cerevisiae.
XX
PN US2002019005-A1.
XX
PD 14-FEB-2002.
XX
PF 02-AUG-2001; 2001US-00921101.
XX
PR 18-FEB-1999; 99US-00252204.
XX
PA (ARCA-) ARCARIS INC.
XX
PI Kamb CA;
XX
DR WPI; 2002-328583/36.
XX
PT Identifying cell proliferation genes for treating diseases related to
PT unregulated proliferation, by selecting revertant cell lines, analyzing
PT their gene expression pattern and identifying differentially expressed
PT genes.
XX
PS Example 4; Page 30; 42pp; English.
XX
CC The present invention relates to selection systems for the identification
CC of cell proliferation genes based on functional analysis. A process is
CC provided for the identification of a cell proliferation promoting
CC activity, the isolation of genes involved in such activity, and the use
CC of these genes for the diagnosis or treatment of a disease associated
CC with excessive cell proliferation. The cell proliferation gene may be an
CC oncogene, a dominant transforming gene, a tumour suppressor gene or a
CC gene involved in the control of apoptosis. Antibodies, peptides and
CC nucleic acids can be designed to specifically interfere with the function
CC of the identified gene and/or its gene product for the treatment of
CC cancer, arteriosclerosis, psoriasis, rheumatoid arthritis and restenosis
CC (all claimed). In an embodiment of the invention, growth-proficient
CC revertants are induced using mutagenic agents termed perturbagens.
CC Revertant cells are selected, and the gene(s) that allow escape from
CC arrest are identified. The present sequence is that of PCR primer oVT201,
CC which is homologous to a region within the PGK1 3' untranslated region.
CC The primer was used in an example from the invention in which the
CC pheromone response pathway of Saccharomyces cerevisiae was used to
CC determine the general efficacy of a screen for perturbagen molecules
XX
SQ Sequence 21 BP; 6 A; 1 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.8e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 8 AGCGTAAAGGATGG 21
||||||||||||||
Db 6 AGCGTAAAGGATGG 19

RESULT 1296
ABS57693
ID ABS57693 standard; DNA; 21 BP.
XX
AC ABS57693;
XX
DT 27-FEB-2003 (first entry)
XX
DE S. cerevisiae PGK1 PCR primer oVT201.
XX
KW Cell proliferation; cellular target; viral growth; perturbagen; PCR;
KW primer; ss.
XX
OS Saccharomyces cerevisiae.
XX
PN US2002132229-A1.
XX
PD 19-SEP-2002.
XX
PF 14-AUG-2001; 2001US-00929663.
XX
PR 19-AUG-1996; 96US-00699266.
PR 04-MAR-1997; 97US-00812994.

PR 19-AUG-1997; 97WO-US014514.
PR 06-NOV-1997; 97US-00965477.
PR 26-FEB-1999; 99US-00259155.
XX
PA (ARCA-) ARCARIS INC.
XX
PI Kamb CA, Poritz MA;
XX
DR WPI; 2003-138536/13.
XX
PT Identifying cell proliferation gene involved in viral growth, comprises
PT identifying cell that continues to proliferate within virally infected
PT cells, and identifying corresponding cell proliferation gene in
PT identified cell.
XX
PS Example 4; Page 30; 43pp; English.
XX
CC This invention describes a novel method for identifying a cell
CC proliferation gene or a cellular target involved in viral growth within a
CC cell. The method comprises: (a) identifying within a number of virally
CC infected cells a cell that continues to proliferate; and (b) identifying
CC within the cell that continues to proliferate a corresponding cell
CC proliferation gene or cellular target. The invention also describes a
CC method for identifying a perturbagen that inhibits viral growth. The cell
CC proliferation gene identified by the above mentioned method is useful for
CC the diagnosis or treatment of a disease associated with aberrant or
CC unregulated cell proliferation, or for the development of antisense
CC approaches and ribozymes. As the method involves positive selection,
CC i.e., selection for growth, rather than cessation of growth, it is easier
CC to identify and separate growing cells from growth arrested cells than to
CC isolate non-transformed revertants. Since cultured tumour cell lines grow
CC vigorously in culture, the method can be performed in a time-efficient
CC manner, as growing colonies can be identified, isolated, and analysed
CC very quickly. Redundancy in growth control pathways is not a problem in
CC the growth suppressed tumour cell lines provided and used with the method
CC of the invention, as is the case in assays based on selection for non-
CC transformed cells. This sequence represents a PCR primer used with the
CC primer represented in ABS57694 which is capable of amplifying the yeast
CC (Saccharomyces cerevisiae) PGK1 3'UTR which is used in a construct to
CC identify perturbagens as described in the method of the invention
XX
SQ Sequence 21 BP; 6 A; 1 C; 8 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.8e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 8 AGCGTAAAGGATGG 21
||||||||||||||
Db 6 AGCGTAAAGGATGG 19

RESULT 1297
ADD14266
ID ADD14266 standard; DNA; 21 BP.
XX
AC ADD14266;
XX
DT 01-JAN-2004 (first entry)
XX
DE Human src biomarker forward PCR primer SEQ ID NO:455.
XX
KW predictor set; protein tyrosine kinase activity modulator;
KW protein tyrosine kinase pathway; protein tyrosine kinase; cytostatic;
KW gene therapy; drug sensitivity; genetic profile; cancer; human;
KW PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003062395-A2.
XX
PD 31-JUL-2003.
XX
PF 17-JAN-2003; 2003WO-US001981.
XX
PR 18-JAN-2002; 2002US-0350061P.
XX
PA (BRIM) BRISTOL-MYERS SQUIBB CO.
XX
PI Huang F, Fairchild CR, Lee FY, Shaw P;
XX
DR WPI; 2003-636735/60.
XX
PT New polynucleotides and polypeptides for predicting the activity of
PT compounds that interact with protein tyrosine kinases and/or protein
PT tyrosine kinase pathways.
XX
PS Example 2; SEQ ID NO 455; 139pp; English.
XX
CC The present invention describes a predictor set comprising a plurality of
CC polynucleotides or polypeptides whose expression pattern is predictive of
CC the response of cells to treatment with a compound that modulates protein
CC tyrosine kinase activity or members of the protein tyrosine kinase
CC pathway. Also described: (1) predicting whether a compound is capable of
CC modulating the activity of cells, comprising obtaining a sample of cells,
CC determining whether the cells express a plurality of markers, and
CC correlating the expression of the markers to the compound's ability to
CC modulate the activity of the cells; (2) a plurality of cell lines for
CC identifying polynucleotides and polypeptides whose expression levels
CC correlate with compound sensitivity or resistance of cells associated
CC with a disease state; and (3) identifying polynucleotides and
CC polypeptides that predict compound sensitivity or resistance of cells
CC associated with a disease state, comprising subjecting the plurality of
CC cell lines to one or more compounds, analysing the expression pattern of
CC a microarray of polynucleotides or polypeptides, and selecting
CC polynucleotides or polypeptides that predict the sensitivity or
CC resistance of cells associated with a disease state by using the
CC expression pattern of the microarray. The polynucleotides and
CC polypeptides have cytostatic activities, and can be used in gene therapy.
CC The polynucleotides and polypeptides are useful in predicting the
CC activity of compounds that interact with protein tyrosine kinases and/or
CC protein tyrosine kinase pathways. These may be used in determining drug
CC sensitivity in patients to allow the development of individualized
CC genetic profiles which aid in treating diseases and disorders (e.g.
CC cancer) based on patient response at a molecular level. The present
CC sequence is used in the exemplification of the present invention.
XX
SQ Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 14; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 9.8e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 245 GCAGTGACCCTGGA 258
||||||||||||||
Db 7 GCAGTGACCCTGGA 20

RESULT 1298
ACH00878
ID ACH00878 standard; DNA; 21 BP.
XX
AC ACH00878;
XX
DT 12-FEB-2004 (first entry)
XX
DE L monocytogenes CtsR protein fragment coding sequence.
XX
KW CtsR; glycine-rich region; stress tolerance; virulence; motility;
KW fermentation; vaccine; antibacterial; Class III stress gene regulator;
KW gene; ds.
XX
OS Listeria monocytogenes.
XX
FH Key Location/Qualifiers

```
FT   CDS             1. .21
FT                   /*tag=  a
FT                   /product= "CtsR glycine-rich region"
FT                   /partial
FT                   /note= "no start or stop codon"
XX
PN   WO2003076463-A2.
XX
PD   18-SEP-2003.
XX
PF   11-MAR-2003; 2003WO-NL000178.
XX
PR   11-MAR-2002; 2002EP-00075946.
XX
PA   (WAGE-) WAGENINGEN CENT FOOD SCI.
XX
PI   Karatzas KA,  Bennik MHJ,  Abee T,  Kleerebezem M,  De Vos WM;
XX
DR   WPI; 2003-731817/69.
DR   P-PSDB; ABG75076.
XX
PT   New nucleic acid molecule comprising a nucleotide sequence encoding an
PT   altered Class III stress gene regulator (CtsR) protein of a Gram-positive
PT   bacterium, useful in a fermentation process, as a probiotic or as a live
PT   oral vaccine.
XX
PS   Example; Fig 1; 46pp; English.
XX
CC   The present invention relates to a nucleic acid molecule which encodes an
CC   altered Class III stress gene regulator (CtsR) protein of a Gram-positive
CC   bacterium. Such an altered CtsR protein has an alteration in the
CC   conserved glycine-rich region that corresponds to amino acid positions 61
CC   -64 of the normal CtsR protein. The alteration confers to the altered
CC   CtsR protein increased stress tolerance, reduced virulence or reduced
CC   mobility of a Gram positive bacterium in which the altered CtsR protein
CC   is expressed as sole CtsR protein. The coding sequence encoding an
CC   altered CtsR protein is useful in a fermentation process, as a probiotic
CC   or as a live oral vaccine. The present sequence is a coding sequence for
CC   the fragment of the Listeria monocytogenes CtsR gene which encodes the
CC   glycine-rich region
XX
SQ   Sequence 21 BP; 4 A; 2 C; 9 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        230 GTGGTGGTGGTGGC 243
              ||||||||||||||
Db          5 GTGGTGGTGGTGGC 18


RESULT 1299
ADG88807/c
ID   ADG88807 standard; DNA; 21 BP.
XX
AC   ADG88807;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human hpa specific antisense RACE PCR primer, hpl-629.
XX
KW   Wound healing; heparanase; ulcer; burn; laceration; surgical incision;
KW   necrosis; pressure wound; diabetic ulcer; angiogenesis; human; therapy;
KW   RACE; rapid amplification of cDNA end; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2003161823-A1.
XX
PD   28-AUG-2003.
XX
PF   14-JAN-2003; 2003US-00341582.
XX
PR   31-AUG-1998;   98WO-US017954.
PR   01-MAR-1999;   99US-00258892.
PR   06-FEB-2001; 2001US-00776874.
PR   05-SEP-2001; 2001WO-IL000830.
PR   19-NOV-2001; 2001US-00988113.
XX
PA   (ILAN/) ILAN N.
PA   (VLOD/) VLODAVSKY I.
PA   (YACO/) YACOBY-ZEEVI O.
PA   (PECK/) PECKER I.
PA   (FEIN/) FEINSTEIN E.
XX
PI   Ilan N,  Vlodavsky I,  Yacoby-Zeevi O,  Pecker I,  Feinstein E;
XX
DR   WPI; 2003-897910/82.
XX
PT   Composition for treating a wound comprising recombinant heparanase is
PT   useful to induce or accelerate wound healing and induce or accelerate
PT   angiogenesis.
XX
PS   Example 6; SEQ ID NO 17; 143pp; English.
XX
CC   The present invention relates to methods and compositions for inducing
CC   and/or accelerating wound healing via the catalytic activity of
CC   heparanase. The invention is used to induce or accelerate a healing
CC   process, particularly of an ulcer, burn, laceration, surgical incision,
CC   necrosis, pressure wound, diabetic ulcer and to induce or accelerate
CC   angiogenesis. The present sequence is human hpa specific antisense RACE
CC   PCR primer.
XX
SQ   Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        273 TGCTGCTCCTGGGG 286
              ||||||||||||||
Db         14 TGCTGCTCCTGGGG 1


RESULT 1300
ADJ13969
ID   ADJ13969 standard; DNA; 21 BP.
XX
AC   ADJ13969;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human DNA probe used to immobilise CpG methylated DNA SeqID 1096.
XX
KW   probe; ss; chemical modification; methylation; array; CpG island;
KW   tumour suppressor; p16; human; H69; H1618.
XX
OS   Homo sapiens.
XX
PN   US2003152950-A1.
XX
PD   14-AUG-2003.
XX
PF   27-JUN-2002; 2002US-00184085.
XX
PR   27-JUN-2001; 2001US-0301370P.
XX
PA   (GARN/) GARNER H R.
PA   (MINN/) MINNA J D.
PA   (LUEB/) LUEBKE K J.
PA   (BALO/) BALOG R P.
XX
PI   Garner HR,  Minna JD,  Luebke KJ,  Balog RP;
XX
DR   WPI; 2003-874843/81.
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```
XX
PT   Analysis of chemical modification of DNA involves obtaining sample of DNA
PT   to be analyzed, treating DNA with chemical reagents that result in
PT   different base sequences, and determining sequence of resulting DNA.
XX
PS   Example 1; SEQ ID NO 1096; 210pp; English.
XX
CC   This invention relates to a novel method for analysing chemically
CC   modified macromolecules. Specifically, it refers to a high throughput
CC   method for the parallel analysis of many potential sites of chemical
CC   modification (e.g. methylation) in DNA. The present invention describes
CC   treating the DNA with one or more chemical reagents that result in
CC   different base sequences depending upon the presence or absence of the
CC   modification of interest. Accordingly, a device comprising an array of
CC   probes is provided to hybridise with and select the altered DNA sequences
CC   that comprise the modifications of interest such as a CpG island. In
CC   particular, this invention refers to analysing the methylation pattern of
CC   a region of the promoter for the tumour suppressor gene p16 from two
CC   human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
CC   is a human DNA probe used to immobilise CpG methylated DNA of the
CC   invention.
XX
SQ   Sequence 21 BP; 4 A; 11 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        555 CCTCAGCCGCCGCC 568
              ||||||||||||||
Db          8 CCTCAGCCGCCGCC 21


RESULT 1301
ADJ14006
ID   ADJ14006 standard; DNA; 21 BP.
XX
AC   ADJ14006;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human DNA probe used to immobilise CpG methylated DNA SeqID 1133.
XX
KW   probe; ss; chemical modification; methylation; array; CpG island;
KW   tumour suppressor; p16; human; H69; H1618.
XX
OS   Homo sapiens.
XX
PN   US2003152950-A1.
XX
PD   14-AUG-2003.
XX
PF   27-JUN-2002; 2002US-00184085.
XX
PR   27-JUN-2001; 2001US-0301370P.
XX
PA   (GARN/) GARNER H R.
PA   (MINN/) MINNA J D.
PA   (LUEB/) LUEBKE K J.
PA   (BALO/) BALOG R P.
XX
PI   Garner HR,  Minna JD,  Luebke KJ,  Balog RP;
XX
DR   WPI; 2003-874843/81.
XX
PT   Analysis of chemical modification of DNA involves obtaining sample of DNA
PT   to be analyzed, treating DNA with chemical reagents that result in
PT   different base sequences, and determining sequence of resulting DNA.
XX
PS   Example 1; SEQ ID NO 1133; 210pp; English.
XX
CC   This invention relates to a novel method for analysing chemically
CC   modified macromolecules. Specifically, it refers to a high throughput
CC   method for the parallel analysis of many potential sites of chemical
CC   modification (e.g. methylation) in DNA. The present invention describes
CC   treating the DNA with one or more chemical reagents that result in
CC   different base sequences depending upon the presence or absence of the
CC   modification of interest. Accordingly, a device comprising an array of
CC   probes is provided to hybridise with and select the altered DNA sequences
CC   that comprise the modifications of interest such as a CpG island. In
CC   particular, this invention refers to analysing the methylation pattern of
CC   a region of the promoter for the tumour suppressor gene p16 from two
CC   human lung tumour cell lines H69 and H1618. This oligonucleotide sequence
CC   is a human DNA probe used to immobilise CpG methylated DNA of the
CC   invention.
XX
SQ   Sequence 21 BP; 4 A; 11 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        555 CCTCAGCCGCCGCC 568
              ||||||||||||||
Db          7 CCTCAGCCGCCGCC 20


RESULT 1302
ADL16386/c
ID   ADL16386 standard; DNA; 21 BP.
XX
AC   ADL16386;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human heparanase 5' RACE primer hpl-629.
XX
KW   Human; ss; heparanase; PCR; primer; heparanase-dependent cancer; cancer;
KW   autoimmune reaction; inflammation.
XX
OS   Homo sapiens.
XX
PN   US2003236215-A1.
XX
PD   25-DEC-2003.
XX
PF   09-JUN-2003; 2003US-00456573.
XX
PR   31-AUG-1998;   98WO-US017954.
PR   01-MAR-1999;   99US-00258892.
PR   08-NOV-1999;   99US-00435739.
XX
PA   (INSI-) INSIGHT STRATEGY & MARKETING LTD.
PA   (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
XX
PI   Pecker I,  Vlodavsky I,  Feinstein E;
XX
DR   WPI; 2004-070610/07.
XX
PT   New antisense oligonucleotide hybridizable with a polynucleotide encoding
PT   a polypeptide with heparanase activity, useful for treating diseases such
PT   as cancer and autoimmune disorders.
XX
PS   Example 6; SEQ ID NO 17; 108pp; English.
XX
CC   The invention relates to an antisense oligonucleotide (ASO) comprising a
CC   polynucleotide or a polynucleotide analogue of at least 10 bases being
CC   hybridisable in vivo , under physiological conditions, with a portion of
CC   a polynucleotide strand encoding a polypeptide having heparanase
CC   catalytic activity. Also included are a method of in vivo downregulating
CC   heparanase activity (comprising administering the ASO in vivo), a method
CC   of treating a subject suffering from a pathological condition
CC   (characterised by heparanase activity, comprising administering ASO to
CC   the subject), a pharmaceutical composition comprising the ASO and a
CC   carrier, an antisense nucleic acid construct (comprising a promoter
CC   sequence and a polynucleotide sequence directing the synthesis of an
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CC   antisense RNA sequence of at least 10 bases being hybridisable in vivo ,
CC   under physiological conditions, with a polynucleotide strand encoding a
CC   polypeptide having heparanase catalytic activity), a method of in vivo
CC   downregulating heparanase activity (comprising administering in vivo the
CC   antisense nucleic acid construct), a pharmaceutical composition
CC   comprising the antisense nucleic acid construct and a carrier, and an
CC   antisense oligonucleotide comprising a polynucleotide or a polynucleotide
CC   analogue of at least 10 bases being hybridisable in vivo , under
CC   physiological conditions, with a portion of a polynucleotide strand being
CC   characterised by forming at least a portion of an untranslated region
CC   (UTR) for a polynucleotide strand encoding a polypeptide having
CC   heparanase catalytic activity. The methods and compositions of the
CC   present invention are useful for the prevention and/or treatment of
CC   diseases or conditions associated with aberrant heparanase activity, such
CC   as heparanase-dependent cancer, cancer, autoimmune reaction and
CC   inflammation. The present sequence is a PCR primer used in the isolation
CC   of human heparanase cDNA.
XX
SQ   Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        273 TGCTGCTCCTGGGG 286
              ||||||||||||||
Db         14 TGCTGCTCCTGGGG 1


RESULT 1303
ADM48723/c
ID   ADM48723 standard; DNA; 21 BP.
XX
AC   ADM48723;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Human hpa DNA amplifying PCR primer, hpl-629.
XX
KW   Transgenic animal; heparanase; cancer; viral infection; restenosis;
KW   neurodegenerative disease; atherosclerosis; pulmonary disorder; hpa; PCR;
KW   primer; human; ss.
XX
OS   Homo sapiens.
XX
PN   US2003217375-A1.
XX
PD   20-NOV-2003.
XX
PF   24-FEB-2003; 2003US-00371218.
XX
PR   31-AUG-1998;   98WO-US017954.
PR   01-MAR-1999;   99US-00258892.
PR   06-FEB-2001; 2001US-00776874.
PR   19-NOV-2001; 2001US-00988113.
XX
PA   (ZCHA/) ZCHARIA E.
PA   (VLOD/) VLODAVSKY I.
PA   (METZ/) METZGER S.
PA   (PECK/) PECKER I.
PA   (ILAN/) ILAN N.
PA   (CHAJ/) CHAJEK-SHAUL T.
PA   (GOLD/) GOLDSHMIDT O.
XX
PI   Zcharia E,  Vlodavsky I,  Metzger S,  Pecker I,  Ilan N;
PI   Chajek-Shaul T,  Goldshmidt O;
XX
DR   WPI; 2004-021918/02.
XX
PT   New transgenic non-human animal expressing heparinase, useful as models
PT   for human disease, such as cancers, viral infection, neurodegenerative
PT   diseases, restenosis, atherosclerosis and pulmonary disorders.
XX
PS   Example 6; SEQ ID NO 17; 106pp; English.
XX
CC   The present invention relates to a transgenic non-human animal whose
CC   genome comprises an exogenous polynucleotide sequence, including a
CC   promoter active in tissues of the non-human, a region encoding a human
CC   heparanase, where the promoter and the region encoding human heparanase
CC   are operably linked in the exogenous polynucleotide such that human
CC   heparanase is expressed in at least a portion of the cells of the non-
CC   human animal. The methods and compositions of the present invention are
CC   useful for the production of transgenic animals expressing heparanase, to
CC   be used as models for human diseases such as cancers, viral infection,
CC   restenosis, neurodegenerative diseases, atherosclerosis and pulmonary
CC   disorders. The present sequence is human hpa DNA amplifying PCR primer
CC   used in the exemplification of the invention.
XX
SQ   Sequence 21 BP; 6 A; 8 C; 6 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        273 TGCTGCTCCTGGGG 286
              ||||||||||||||
Db         14 TGCTGCTCCTGGGG 1


RESULT 1304
ADM69583/c
ID   ADM69583 standard; DNA; 21 BP.
XX
AC   ADM69583;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Plant gene polymorphism marker related primer, SEQ ID 462.
XX
KW   Primer; variation mapping; mutation mapping; plant;
KW   gene polymorphism marker; ss.
XX
OS   Synthetic.
XX
PN   JP2003289885-A.
XX
PD   14-OCT-2003.
XX
PF   31-JAN-2003; 2003JP-00024620.
XX
PR   01-FEB-2002; 2002JP-00025338.
XX
PA   (RIKA ) RIKAGAKU KENKYUSHO.
PA   (SAIM-) SAI MEDIA KK.
PA   (MATS/) MATSUI M.
PA   (NAKA/) NAKAZAWA M.
XX
DR   WPI; 2004-126231/13.
XX
PT   A primer set and method useful for mapping at least the
PT   variation/mutation part of a plant gene using a gene polymorphism marker.
XX
PS   Claim 7; SEQ ID NO 462; 120pp; Japanese.
XX
CC   The present invention relates to a primer set and method for mapping at
CC   least the variation/mutation part of a plant gene using a gene
CC   polymorphism marker. A mutation site of the plant gene is mapped by
CC   utilizing a genetic polymorphism marker as follows: (a) genomic DNA is
CC   prepared from a plant homozygously having a mutation to be an object of
CC   the mapping; (b) A forward primer 1 containing a base corresponding to
CC   the gene polymorphic maker of one ecotype plant, a forward primer 2
CC   containing a base corresponding to the genetic polymorphism of the other
CC   ecotype plant and a reverse primer 3 based on the base sequence common
CC   with both the ecotype plants are prepared; (c) two kinds of
CC   oligonucleotides emitting fluorescence of different colors when the
CC   genetic polymorphism marker is detected are prepared; (d) an
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CC   amplification reaction of the genomic DNA is carried out in the presence
CC   of the primers 1, 2 and 3 and the two kinds of the oligonucleotides; (e)
CC   the fluorescence intensity emitted from the resultant reactional product
CC   is detected and (f) the position on the genome of the mutation site is
CC   determined from the results of detection. The present sequence is a
CC   primer, used to illustrate the invention.
XX
SQ   Sequence 21 BP; 4 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 9.8e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        868 CAGTACCTGGATGA 881
              ||||||||||||||
Db         18 CAGTACCTGGATGA 5


RESULT 1305
ADP15685
ID   ADP15685 standard; DNA; 25 BP.
XX
AC   ADP15685;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Renal cell carcinoma differentially expressed gene probe #2090.
XX
KW   ss; diagnosis; non-blood disease; solid tumor; gene expression;
KW   peripheral blood mononuclear cell; renal cell carcinoma; prostate cancer;
KW   head/neck cancer; differential expression; probe.
XX
OS   Homo sapiens.
XX
PN   WO2004048933-A2.
XX
PD   10-JUN-2004.
XX
PF   21-NOV-2003; 2003WO-US037481.
XX
PR   21-NOV-2002; 2002US-0427982P.
PR   03-APR-2003; 2003US-0459782P.
XX
PA   (AMHP ) WYETH.
PA   (TWIN/) TWINE N C.
PA   (BURC/) BURCZYNSKI M E.
PA   (TREP/) TREPICCHIO W L.
PA   (DORN/) DORNER A.
PA   (STOV/) STOVER J A.
PA   (SLON/) SLONI D K.
XX
PI   Twine NC,  Burczynski ME,  Trepicchio WL,  Dorner A,  Stover JA;
PI   Sloni DK;
XX
DR   WPI; 2004-460799/43.
XX
PT   Diagnosing non-blood disease such as solid tumor, involves comparing
PT   differential expression profile of specific genes in peripheral blood
PT   sample of subject with reference expression profile of specific genes.
XX
PS   Disclosure; SEQ ID NO 2421; 350pp; English.
XX
CC   The invention relate to a method of diagnosing (M1) non-blood disease
CC   such as solid tumor by providing peripheral blood sample of human having
CC   non-blood disease, and comparing an expression profile of specific genes
CC   in the peripheral blood sample to reference expression profile of the
CC   genes, where each of the genes is differentially expressed in peripheral
CC   blood mononuclear cells (PBMCs) of patients having the disease as
CC   compared to PBMCs of normal humans. The method is useful for diagnosing
CC   non-blood disease such as solid tumor. The solid tumor is chosen from
CC   renal cell carcinoma (RCC), prostate cancer and head/neck cancer. The
CC   peripheral blood sample comprises enriched PBMCs. The peripheral blood
CC   sample is a whole blood sample (claimed). (M1) is useful for identifying
CC   genes that are differentially expressed in peripheral blood samples
CC   isolated at different stages of progression, development or treatment of
CC   RCC and/or other solid tumors. This sequence corresponds to a probe to
CC   detect a gene that is differentially expressed and detected by the method
CC   of the invention.
XX
SQ   Sequence 25 BP; 6 A; 6 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 14;  DB 1;  Length 25;
  Best Local Similarity   77.3%;  Pred. No. 1.1e+03;
  Matches   17;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy       1691 TCCCTGCTTACTCTCTGCCTAC 1712
              | ||||||| | || | ||||
Db          2 TTCCTGCTTAATGTCAGTCTAC 23


RESULT 1306
AAT53444
ID   AAT53444 standard; RNA; 17 BP.
XX
AC   AAT53444;
XX
DT   25-MAR-2003  (revised)
DT   27-MAR-1997  (first entry)
XX
DE   Rat ICAM hammerhead ribozyme target sequence (nt. position 510).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Rattus rattus.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
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PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 201; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC   nucleotide base position indicated in the DE line. Regions of the mRNA
CC   that do not form secondary folding structures and that contain potential
CC   hammerhead and hairpin ribozyme cleavage sites were identified by
CC   computer analysis. Ribozymes directed against these mRNA sequences were
CC   designed and synthesised with modifications that improve their nuclease
CC   resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC   inhibit ICAM-1 expression, making them useful for reducing transplant
CC   rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC   asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC   correct PI field.)
XX
SQ   Sequence 17 BP; 2 A; 4 C; 7 G; 0 T; 4 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   70.6%;  Pred. No. 9e+02;
  Matches   12;  Conservative    3;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        272 GTGCTGCTCCTGGGGAA 288
              |:||:||:||  |||||
Db          1 GUGCUGCUCCGUGGGAA 17


RESULT 1307
AAT81489/c
ID   AAT81489 standard; RNA; 17 BP.
XX
AC   AAT81489;
XX
DT   07-DEC-1997  (first entry)
XX
DE   Human c-myb hammerhead ribozyme target sequence (nt. position 2665).
XX
KW   Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
KW   smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
KW   coronary angioplasty; ss.
XX
OS   Homo sapiens.
XX
PN   WO9531541-A2.
XX
PD   23-NOV-1995.
XX
PF   18-MAY-1995;   95WO-US006368.
XX
PR   18-MAY-1994;   94US-00245466.
PR   13-JAN-1995;   95US-00373124.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Draper K,  Mcswiggen J,  Jarvis T;
XX
DR   WPI; 1996-010927/01.
XX
PT   New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
PT   for treating restenosis or cancer.
XX
PS   Claim 1; Page 76; 128pp; English.
XX
CC   The present sequence represents the preferred target sequence for an
CC   enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC   the human c-myb sequence at the base position indicated in the descriptor
CC   line. The c-myb sequence was screened for optimal ribozyme target sites
CC   using a computer folding algorithm, and regions of the mRNA which did not
CC   form secondary folding structures and contained potential ribozyme
CC   cleavage sites were identified. Ribozymes were synthesised and their
CC   activities optimised by either varying the length of the binding arms or
CC   by modification to prevent degradation by nucleases. The ribozymes cleave
CC   the c-myb sequence and can be used to prevent smooth muscle cell
CC   hyperproliferation in restenosis, especially after coronary angioplasty,
CC   and in cancers
XX
SQ   Sequence 17 BP; 1 A; 3 C; 3 G; 0 T; 10 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        672 AAGCAAGCTCACAGACA 688
              |||||||| ||||| |
Db         17 AAGCAAGCTAACAGAAA 1


RESULT 1308
AAT81488/c
ID   AAT81488 standard; RNA; 17 BP.
XX
AC   AAT81488;
XX
DT   07-DEC-1997  (first entry)
XX
DE   Human c-myb hammerhead ribozyme target sequence (nt. position 2664).
XX
KW   Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
KW   smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
KW   coronary angioplasty; ss.
XX
OS   Homo sapiens.
XX
PN   WO9531541-A2.
XX
PD   23-NOV-1995.
XX
PF   18-MAY-1995;   95WO-US006368.
XX
PR   18-MAY-1994;   94US-00245466.
PR   13-JAN-1995;   95US-00373124.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Draper K,  Mcswiggen J,  Jarvis T;
XX
DR   WPI; 1996-010927/01.
XX
PT   New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
PT   for treating restenosis or cancer.
XX
PS   Claim 1; Page 76; 128pp; English.
XX
CC   The present sequence represents the preferred target sequence for an
CC   enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC   the human c-myb sequence at the base position indicated in the descriptor
CC   line. The c-myb sequence was screened for optimal ribozyme target sites
CC   using a computer folding algorithm, and regions of the mRNA which did not
CC   form secondary folding structures and contained potential ribozyme
CC   cleavage sites were identified. Ribozymes were synthesised and their
CC   activities optimised by either varying the length of the binding arms or
CC   by modification to prevent degradation by nucleases. The ribozymes cleave
CC   the c-myb sequence and can be used to prevent smooth muscle cell
```

```
CC   hyperproliferation in restenosis, especially after coronary angioplasty,
CC   and in cancers
XX
SQ   Sequence 17 BP; 1 A; 3 C; 3 G; 0 T; 10 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        673 AGCAAGCTCACAGACAA 689
              ||||||| ||||| ||
Db         17 AGCAAGCTAACAGAAAA 1


RESULT 1309
AAT50895
ID   AAT50895 standard; DNA; 17 BP.
XX
AC   AAT50895;
XX
DT   26-AUG-1997  (first entry)
XX
DE   Probe #9 for interleukin-6 receptor.
XX
KW   Probe; interleukin-6 receptor; IL-6R; cytokine; cellular proliferation;
KW   transmembrane glycoprotein receptor; signal transducer; gp130; inhibitor;
KW   IL-6; cancer; renal cell carcinoma; autoimmune disease; viral infection;
KW   therapy; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    1. .17
FT                   /*tag= a
FT                   /note= "optionally phosphorothioated"
XX
PN   EP747386-A2.
XX
PD   11-DEC-1996.
XX
PF   07-JUN-1996;   96EP-00304315.
XX
PR   07-JUN-1995;   95US-00484666.
PR   07-JUN-1995;   95US-00486408.
XX
PA   (GENP-) GEN-PROBE INC.
XX
PI   Brown SJ,  Dattagupta N,  Naidu YM;
XX
DR   WPI; 1997-023093/03.
XX
PT   Oligo:nucleotide(s) complementary to interleukin-6 receptor mRNA - for
PT   treating proliferative diseases, e.g. cancer, auto-immune diseases or
PT   viral infections.
XX
PS   Claim 1; Page 16; 18pp; English.
XX
CC   AAT50887-T50904 represent oligonucleotides of the invention. These
CC   sequences are all probes for interleukin-6 receptor (IL-6R) mRNA. IL-6 is
CC   one of the most well characterised of the cytokines. It functions through
CC   interacting with at least two transmembrane glycoprotein receptor
CC   molecules on the surface of target cells. The receptors are the IL-6R,
CC   and the signal transducer gp130. Signal transduction by IL-6 involves the
CC   concerted action of both IL-6R and gp130. IL-6 overproduction is
CC   implicated in many different disease states, particularly in cellular
CC   proliferation associated with these diseases. These sequences bind to the
CC   IL-6R coding sequence, thereby inhibiting IL-6R production. The sequences
CC   therefore inhibit the functioning of IL-6. These sequences can be used
CC   for inhibiting disease-associated cellular proliferation. The
CC   oligonucleotides are especially useful for treating cancer (e.g. renal
CC   cell carcinoma), autoimmune diseases or viral infections. They can also
CC   be used as probes for detecting IL-6 receptor mRNA, especially for
CC   evaluating the effectiveness of drugs in reducing IL-6 receptor mRNA
CC   levels
XX
SQ   Sequence 17 BP; 2 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1596 GGTGGACACCGAGTTCT 1612
              |||||||||| |||||
Db          1 GGTGGACACCTCGTTCT 17


RESULT 1310
AAX71472
ID   AAX71472 standard; RNA; 17 BP.
XX
AC   AAX71472;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human KDR VEGF receptor hammerhead ribozyme substrate #484.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 111; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 0 A; 5 C; 7 G; 0 T; 5 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   64.7%;  Pred. No. 9e+02;
  Matches   11;  Conservative    4;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1035 CTTTGGCCTGGCCCGAG 1051
              |:::||| :|||||| |
Db          1 CUUUGGCUUGGCCCGGG 17
```

RESULT 1311
AAA23256/c
ID AAA23256 standard; RNA; 17 BP.
XX
AC AAA23256;
XX
DT 19-JUN-2000 (first entry)
XX
DE Integrin subunit beta 3 substrate sequence SEQ ID NO:6482.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US006507.
XX
PR 27-MAR-1998; 98US-0079678P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX
DR WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or stability
PT of an mRNA encoding an angiogenic factors.
XX
PS Claim 54; Page 271; 305pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 3 A; 3 C; 4 G; 0 T; 7 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 9e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 808 ATTATCCACACGGAGAA 824
||||||| |||||| |
Db 17 ATTATCCAAACGGAGCA 1

RESULT 1312
AAV92551
ID AAV92551 standard; RNA; 17 BP.
XX
AC AAV92551;
XX
DT 18-FEB-1999 (first entry)
XX
DE Human A-Raf substrate position 1538.
XX
KW Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;
KW screening; identification; synthesis; deprotection; purification; cancer;
KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
KW restenosis; rheumatoid arthritis; ss.
XX
OS Homo sapiens.
XX
PN WO9850530-A2.
XX
PD 12-NOV-1998.
XX
PF 05-MAY-1998; 98WO-US009249.
XX
PR 09-MAY-1997; 97US-0046059P.
PR 09-JUN-1997; 97US-0049002P.
PR 03-JUL-1997; 97US-0051718P.
PR 22-AUG-1997; 97US-0056808P.
PR 02-OCT-1997; 97US-0061321P.
PR 02-OCT-1997; 97US-0061324P.
PR 05-NOV-1997; 97US-0064866P.
PR 19-DEC-1997; 97US-0068212P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;
PI Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Burgin A;
PI Thompson J, Workman CT, Beaudry A, Sweedler D;
XX
DR WPI; 1999-009494/01.
XX
PT Identifying new catalytic nucleic acid that modulates selected processes
PT - especially ribozymes that cleave Raf RNA for treating cancer,
PT restenosis, and also new ribozymes and modified nucleoside triphosphates
PT used as antiviral agents and synthons.
XX
PS Claim 177; Page 160; 259pp; English.
XX
CC A method has been developed for the identification of a nucleic acid
CC capable of modulating a process in a biological system. The method
CC comprises: (a) introducing into the system a random library of nucleic
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC in systems where modulation has occurred and/or determining the sequence
CC of at least part of the SBDs in such systems. Nucleic acid molecules with
CC endonuclease activity and catalytic activity, from the present invention,
CC are used to modulate gene expression in plant and mammalian cells and to
CC cleave target nucleic acid, particularly for treating systemic diseases
CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
CC ascites and infection. They may also be used to detect genetic drift and
CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
CC with RNA-cleaving activity that modulate expression of the Raf gene, are
CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
CC generally any condition associated with the level of c-raf. Introduction
CC of sugar/phosphate modifications increases stability against nuclease and
CC activity. AAV90922 to AAV93877 represent NACs that can be used in the

```
CC   method, specifically for modulating the expression of a Raf gene
XX
SQ   Sequence 17 BP; 1 A; 3 C; 7 G; 0 T; 6 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   58.8%;  Pred. No. 9e+02;
  Matches   10;  Conservative    5;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1030 GCTGACTTTGGCCTGGC 1046
              | :|||:::||| :|||
Db          1 GGUGACUUUGGCUUGGC 17


RESULT 1313
AAA36495
ID   AAA36495 standard; DNA; 17 BP.
XX
AC   AAA36495;
XX
DT   26-JUL-2000  (first entry)
XX
DE   Human genomic SNP allele specific oligonucleotide SEQ ID NO:560.
XX
KW   Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;
KW   allele specific oligonucleotide; ASO; reduced complexity genome; RCG;
KW   genomic classification; identification; DNA fingerprinting;
KW   tumour characterisation; hybridisation; ss.
XX
OS   Homo sapiens.
XX
PN   WO200018960-A2.
XX
PD   06-APR-2000.
XX
PF   24-SEP-1999;   99WO-US022283.
XX
PR   25-SEP-1998;   98US-0101757P.
XX
PA   (MASI ) MASSACHUSETTS INST TECHNOLOGY.
XX
PI   Landers JE,  Jordan B,  Housman DE,  Charest A;
XX
DR   WPI; 2000-293181/25.
XX
PT   Detection of single nucleotide polymorphisms in genomes by preparation
PT   and analysis of reduced complexity genomes, useful for genotyping,
PT   fingerprinting and determining allele frequency of SNPs.
XX
PS   Disclosure; Page 69; 111pp; English.
XX
CC   A method has been developed for detecting the presence or absence of a
CC   single nucleotide polymorphism (SNP) allele in a genomic sample. The
CC   method comprises preparing a reduced complexity genome (RCG) from the
CC   genomic sample and analysing the RCG for the presence or absence of a SNP
CC   allele. The method can be used to characterise a tumour, to generate a
CC   genomic pattern for an individual genome or to generate a genomic
CC   classification code for a genome. The method can be used to assess
CC   whether a subject is at risk for developing a disease or to identify a
CC   set of SNP alleles associated with a disease. The method can also be used
CC   to perform linkage analysis. AAA35944 to AAA35947 represent sequences
CC   used in the exemplification of the present invention. AAA35948 to
CC   AAA36632 represent nucleotide sequences containing SNPs
XX
SQ   Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1112 CTGACATCCTGCTTGGG 1128
              ||||||| ||||| ||
Db          1 CTGACATACTGCTTAGG 17


RESULT 1314
AAA72376/c
ID   AAA72376 standard; DNA; 17 BP.
XX
AC   AAA72376;
XX
DT   19-DEC-2000  (first entry)
XX
DE   Mouse angiotensin II type 2 receptor (AT2 receptor) PCR primer, AT2-R.
XX
KW   Mouse angiotensin II type 2 receptor; AT2 receptor; vascular tissue;
KW   transgenic animal; blood pressure regulation; PCR primer; ss.
XX
OS   Mus sp.
XX
PN   WO200045633-A1.
XX
PD   10-AUG-2000.
XX
PF   04-FEB-2000; 2000WO-JP000615.
XX
PR   05-FEB-1999;   99JP-00029354.
XX
PA   (SUNR ) SUNTORY LTD.
XX
PI   Kurihara T,  Matsubara H;
XX
DR   WPI; 2000-543434/49.
XX
PT   Transgenic animals expressing angiotensin II2 receptor gene in vascular
PT   tissue used as a model for studying function and blood pressure
PT   regulatory activity of the receptor.
XX
PS   Example 3; Page 9; 26pp; Japanese.
XX
CC   The invention relates to transgenic animals which express the angiotensin
CC   II type 2 receptor (AT2 receptor) gene in vascular tissue. The invention
CC   also relates to a method for the production of transgenic animal of the
CC   invention, comprising inserting the AT2 receptor gene into pluripotent
CC   cells of the animal, implanting and bringing to term to give transgenic
CC   animals whose descendents will also express the AT2 receptor gene. The
CC   transgenic animal is a model system for the study of the vascular
CC   function and blood pressure regulatory function of the AT2 receptor in
CC   vivo or in vitro. It may also be used to study the competitive activity
CC   of AT1 and AT2 receptors. Sequences AAA72375-A72376 represent PCR primers
CC   used in an exemplification of the invention. The present sequence
CC   represents a mouse AT2 receptor PCR primer
XX
SQ   Sequence 17 BP; 2 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        949 TACTGCCACCGGCAGAA 965
              | |||||||| ||||||
Db         17 TGCTGCCACCAGCAGAA 1


RESULT 1315
AAF95069
ID   AAF95069 standard; DNA; 17 BP.
XX
AC   AAF95069;
XX
DT   23-MAY-2001  (first entry)
XX
DE   Mutant capture oligonucleotide #62.
XX
KW   Tubercle bacillus; drug sensitivity; drug resistance; rifampicin;
KW   streptomycin; kanamycin; isoniazid; ethambutol; rpoB gene; rrs gene;
KW   rpsL gene; inhA gene; katG gene; embB gene; probe; PCR primer; ss.
```

```
XX
OS   Mycobacterium tuberculosis.
XX
PN   EP1076099-A2.
XX
PD   14-FEB-2001.
XX
PF   02-AUG-2000; 2000EP-00306563.
XX
PR   03-AUG-1999;   99JP-00220357.
XX
PA   (NISN ) NISSHINBO IND INC.
PA   (SYST-) SYSTEM RES INC.
XX
PI   Suzuki Y,  Nishida M,  Takenishi S;
XX
DR   WPI; 2001-246696/26.
XX
PT   New oligonucleotides, nucleic acid probes and primers are useful for
PT   differentiating drug-resistance and determining infection with tubercle
PT   bacilli.
XX
PS   Claim 16; Page 35; 114pp; English.
XX
CC   The present invention relates to oligonucleotides based on nucleotide
CC   sequences obtained from both wild-type tubercle bacilli (wtTB) that are
CC   susceptible to a drug and mutant-type tubercle bacilli (mtTB) that are
CC   resistant to a drug. The drugs used in the present invention are
CC   rifampicin (RFP), streptomycin (SM), kanamycin (KM), isoniazid (INH) and
CC   ethambutol (EB). The rpoB gene is responsible for resistance to RFP; the
CC   rrs gene is responsible for resistance to SM and KM; the rpsL gene is
CC   responsible for resistance to SM; the inhA gene is responsible for
CC   resistance to INH; the katG gene is responsible for resistance to INH;
CC   and the embB gene is responsible for resistance to EB. The present
CC   invention also relates to nucleic acid probes having part of a nucleotide
CC   sequence of tubercle bacilli (TB) responsible for drug resistance and
CC   primers used to generate the probes. The present sequence is an
CC   oligonucleotide of the present invention. The oligonucleotides of the
CC   present invention can be used to enable the differentiation of drug
CC   resistance and the determination of infection with tubercle bacilli
CC   simultaneously
XX
SQ   Sequence 17 BP; 1 A; 7 C; 7 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1035 CTTTGGCCTGGCCCGAG 1051
              | | ||||||||||||||
Db          1 CCTGGGCCTGGCCCGAG 17


RESULT 1316
ABN10018
ID   ABN10018 standard; DNA; 17 BP.
XX
AC   ABN10018;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10010.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 10010; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 1 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        386 CGTCCTCGGATGAGGTG 402
              ||||||||| | ||||
Db          1 CGTCCTCGGAGGCGGTG 17


RESULT 1317
ABN08053
ID   ABN08053 standard; DNA; 17 BP.
XX
AC   ABN08053;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8045.
```

```
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 8045; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 6 A; 2 C; 7 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        127 GATCGGATGAAGAAGAT 143
              || ||||||||| ||||
Db          1 GAGCGGATGAAGCAGAT 17
```

```
RESULT 1318
ABN06804/c
ID   ABN06804 standard; DNA; 17 BP.
XX
AC   ABN06804;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6796.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 6796; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
```

```
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 0 A; 3 C; 11 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        552 GCCCCTCAGCCGCCGCC 568
              ||||| ||||| |||||
Db         17 GCCCCACAGCCACCGCC 1


RESULT 1319
ABN01534/c
ID   ABN01534 standard; DNA; 17 BP.
XX
AC   ABN01534;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1526.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 1526; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 3 A; 2 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        986 AGCCCCAGAACCTGCTC 1002
              ||||||| ||||||||
Db         17 AGCCCCATCACCTGCTC 1


RESULT 1320
ABN10672/c
ID   ABN10672 standard; DNA; 17 BP.
XX
AC   ABN10672;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10664.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 10664; 214pp; English.
```

```
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 4 A; 7 C; 6 G; 0 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1026 GCTGGCTGACTTTGGCC 1042
              ||||||||  ||  |||||
Db         17 GCTGGCTGGCTCTGGCC 1


RESULT 1321
ABN06803/c
ID   ABN06803 standard; DNA; 17 BP.
XX
AC   ABN06803;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6795.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 6795; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
SQ   Sequence 17 BP; 1 A; 2 C; 11 G; 3 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        553 CCCCTCAGCCGCCGCCT 569
              ||||  |||||  ||||||
Db         17 CCCCACAGCCACCGCCT 1


RESULT 1322
ABQ63455/c
ID   ABQ63455 standard; DNA; 17 BP.
XX
AC   ABQ63455;
XX
DT   20-AUG-2002  (first entry)
XX
DE   Human KTOM1a portion (ABQ63232) probe # 168.
XX
KW   Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;
KW   gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;
KW   kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200224750-A2.
XX
PD   28-MAR-2002.
XX
PF   21-SEP-2001; 2001WO-US029656.
XX
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
```

PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 23-MAY-2001; 2001US-00864761.
PR 28-AUG-2001; 2001US-0315676P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Zhang J;
XX
DR WPI; 2002-479509/51.
XX
PT New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic
PT acids encoding the protein, useful for treating subjects having defects
PT in KTOM1 which can manifest as cancer of the kidney, or as a disorder of
PT e.g., liver or bone.
XX
PS Example 2; Page 179; 418pp; English.
XX
CC The invention relates to a novel isolated nucleic acid encoding human
CC KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the
CC invention has cytostatic activity. The nucleotide may have a use in gene
CC therapy. The KTOM1 nucleic acids may be used to diagnose, treat or
CC monitor a disease caused by altered expression of human KTOM1.
CC Compositions comprising the nucleic acids, proteins or antibodies may be
CC used to treat subjects having defects in KTOM1 which can manifest as
CC cancer of the kidney, as well as a disorder of liver, bone marrow, brain,
CC heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta
CC function. The sequence represents a probe used in the invention to scan
CC the nt 1-1001 portion of human KTOM1a (ABQ63232)
XX
SQ Sequence 17 BP; 5 A; 8 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 9e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1397 AGCTGTTGCAGTTTGAG 1413
              ||||||||||| || |
Db         17 AGCTGTTGCAGTGTGGG 1
```

RESULT 1323
ABK18593
ID ABK18593 standard; RNA; 17 BP.
XX
AC ABK18593;
XX
DT 09-APR-2002 (first entry)
XX
DE Human ERG G-cleaver ribozyme target sequence Seq ID No 1240.
XX
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW amberzyme.
XX
OS Homo sapiens.
XX
PN WO200188124-A2.
XX
PD 22-NOV-2001.
XX
PF 16-MAY-2001; 2001WO-US015866.
XX
PR 16-MAY-2000; 2000US-00572021.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (GLAX) GLAXO GROUP LTD.
XX
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Mclaughlin F, Randi AM;
XX
DR WPI; 2002-082995/11.
XX
PT Novel polynucleotide which down regulates expression of Ets-related gene,
PT useful for treating cancer, diabetic retinopathy, macular degeneration,
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS Claim 4; Page 82; 149pp; English.
XX
CC The invention relates to a nucleic acid molecule (I) which down regulates
CC expression of an Ets-related gene (ERG). (I) is useful for treating
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC treating a patient having a condition associated with the level of ERG,
CC by contacting cells of the patient with (I) under conditions suitable for
CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
CC angiogenesis is treated by administering (I) to the patient in
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC diseases related to the expression of ERG, and as diagnostic tool to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of ERG RNA in a cell. (I) is useful for specifically
CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABK17354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
CC related PCR primers of the invention
XX
SQ Sequence 17 BP; 1 A; 9 C; 4 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 9e+02;
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

```
Qy        557 TCAGCCGCCGCCTCCGT 573
              :|||||||  ||:|||:
Db          1 UCAGCCGCGCCCUCCGU 17
```

RESULT 1324
ABK18786
ID ABK18786 standard; RNA; 17 BP.
XX
AC ABK18786;
XX
DT 09-APR-2002 (first entry)
XX
DE Human ERG DNAzyme target sequence Seq ID No 1433.
XX
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW amberzyme.

```
XX
OS   Homo sapiens.
XX
PN   WO200188124-A2.
XX
PD   22-NOV-2001.
XX
PF   16-MAY-2001; 2001WO-US015866.
XX
PR   16-MAY-2000; 2000US-00572021.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T,  Von Carlowitz I,  Mcswiggen JA,  Mclaughlin F,  Randi AM;
XX
DR   WPI; 2002-082995/11.
XX
PT   Novel polynucleotide which down regulates expression of Ets-related gene,
PT   useful for treating cancer, diabetic retinopathy, macular degeneration,
PT   arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
PS   Claim 4; Page 91; 149pp; English.
XX
CC   The invention relates to a nucleic acid molecule (I) which down regulates
CC   expression of an Ets-related gene (ERG). (I) is useful for treating
CC   conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC   tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC   neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC   vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC   Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC   syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC   treating a patient having a condition associated with the level of ERG,
CC   by contacting cells of the patient with (I) under conditions suitable for
CC   the treatment. The method comprises the use of one or more therapies
CC   under conditions suitable for the treatment. Leukaemia or tumour
CC   angiogenesis is treated by administering (I) to the patient in
CC   conjunction with one or more of other therapies such as radiation or
CC   chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC   cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC   ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC   cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC   diseases related to the expression of ERG, and as diagnostic tool to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of ERG RNA in a cell. (I) is useful for specifically
CC   targeting genes that share homology with ERG gene or ERG fusion genes.
CC   ABK17354-ABK22719 represent nucleic acids, including antisense and
CC   enzymatic nucleic acid molecules which regulate expression of ERG, and
CC   related PCR primers of the invention
XX
SQ   Sequence 17 BP; 4 A; 5 C; 6 G; 0 T; 2 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   76.5%;  Pred. No. 9e+02;
  Matches   13;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        705 GGAGATCAGACTGGAAC 721
              |||||:||| |:||| |
Db          1 GGAGAUCAGCCUGGACC 17


RESULT 1325
ABS75050
ID   ABS75050 standard; DNA; 17 BP.
XX
AC   ABS75050;
XX
DT   24-DEC-2002  (first entry)
XX
DE   Human PAPP-Ea associated 17-mer SEQ ID 576.
XX
KW   PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW   contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW   dysgenetic pregnancy; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002102252-A1.
XX
PD   01-AUG-2002.
XX
PF   06-APR-2001; 2001US-00827998.
XX
PR   26-MAY-2000; 2000US-0207456P.
XX
PA   (GUYY/) GU Y.
PA   (SHAN/) SHANNON M E.
XX
PI   Gu Y,  Shannon ME;
XX
DR   WPI; 2002-697817/75.
XX
PT   New isolated nucleic acid encoding an isoform of human pregnancy
PT   associated plasma protein E, for preventing or aborting pregnancy.
XX
PS   Example 2; Page 151; 353pp; English.
XX
CC   This invention describes a novel isolated nucleic acid that encodes one
CC   of three new isoforms of human pregnancy associated plasma protein E,
CC   hPAPP-E. The products of the invention have abortive and contraceptive
CC   activity and can be used for gene therapy or in a vaccine. The nucleic
CC   acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC   used in pharmaceutical compositions or vaccines for preventing or
CC   aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC   dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC   the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC   antibodies can be used to assess the expression levels of PAPP-E isoform
CC   proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC   antenatally. This sequence represents an oligomer used in scanning the
CC   human PAPP-E genes described in the disclosure of the invention
XX
SQ   Sequence 17 BP; 6 A; 2 C; 8 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1011 GAGGGGAGAGCTCAAGC 1027
              |||| ||||| ||||||
Db          1 GAGGAGAGAGGTCAAGC 17


RESULT 1326
ABS75049
ID   ABS75049 standard; DNA; 17 BP.
XX
AC   ABS75049;
XX
DT   24-DEC-2002  (first entry)
XX
DE   Human PAPP-Ea associated 17-mer SEQ ID 575.
XX
KW   PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW   contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW   dysgenetic pregnancy; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002102252-A1.
XX
PD   01-AUG-2002.
XX
PF   06-APR-2001; 2001US-00827998.
XX
PR   26-MAY-2000; 2000US-0207456P.
XX
```

PA (GUYY/) GU Y.
PA (SHAN/) SHANNON M E.
XX
PI Gu Y, Shannon ME;
XX
DR WPI; 2002-697817/75.
XX
PT New isolated nucleic acid encoding an isoform of human pregnancy
PT associated plasma protein E, for preventing or aborting pregnancy.
XX
PS Example 2; Page 150; 353pp; English.
XX
CC This invention describes a novel isolated nucleic acid that encodes one
CC of three new isoforms of human pregnancy associated plasma protein E,
CC hPAPP-E. The products of the invention have abortive and contraceptive
CC activity and can be used for gene therapy or in a vaccine. The nucleic
CC acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC used in pharmaceutical compositions or vaccines for preventing or
CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC antibodies can be used to assess the expression levels of PAPP-E isoform
CC proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC antenatally. This sequence represents an oligomer used in scanning the
CC human PAPP-E genes described in the disclosure of the invention
XX
SQ Sequence 17 BP; 7 A; 1 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 9e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1010 AGAGGGGAGAGCTCAAG 1026
||||| ||||| |||||
Db 1 AGAGGAGAGAGGTCAAG 17

RESULT 1327
ABV89395/c
ID ABV89395 standard; DNA; 17 BP.
XX
AC ABV89395;
XX
DT 23-DEC-2002 (first entry)
XX
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 108.
XX
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX
OS Homo sapiens.
XX
PN EP1239051-A2.
XX
PD 11-SEP-2002.
XX
PF 28-JAN-2002; 2002EP-00001165.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 23-MAY-2001; 2001US-00864761.
PR 10-OCT-2001; 2001US-0328205P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M;
XX
DR WPI; 2002-684061/74.
XX
PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.
XX
PS Example 2; SEQ ID NO 108; 60pp + Sequence Listing; English.
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office
XX
SQ Sequence 17 BP; 3 A; 2 C; 11 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 9e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 556 CTCAGCCGCCGCCTCCG 572
||||||| || ||||||
Db 17 CTCAGCCCCCTCCTCCG 1

RESULT 1328
ABV89567/c
ID ABV89567 standard; DNA; 17 BP.
XX
AC ABV89567;
XX
DT 23-DEC-2002 (first entry)
XX
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 280.
XX
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX
OS Homo sapiens.
XX
PN EP1239051-A2.
XX
PD 11-SEP-2002.
XX
PF 28-JAN-2002; 2002EP-00001165.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 23-MAY-2001; 2001US-00864761.
PR 10-OCT-2001; 2001US-0328205P.
XX

PA (AEOM-) AEOMICA INC.
XX
PI Shannon M;
XX
DR WPI; 2002-684061/74.
XX
PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.
XX
PS Example 2; SEQ ID NO 280; 60pp + Sequence Listing; English.
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office
XX
SQ Sequence 17 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        696 GGCACTCAAGGAGATCA 712
              ||||||| || ||||||
Db         17 GGCACTCCAGAAGATCA 1
```

RESULT 1329
ABV91270
ID ABV91270 standard; DNA; 17 BP.
XX
AC ABV91270;
XX
DT 23-DEC-2002 (first entry)
XX
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1983.
XX
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX
OS Homo sapiens.
XX
PN EP1239051-A2.
XX
PD 11-SEP-2002.
XX
PF 28-JAN-2002; 2002EP-00001165.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 23-MAY-2001; 2001US-00864761.
PR 10-OCT-2001; 2001US-0328205P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M;
XX
DR WPI; 2002-684061/74.
XX
PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.
XX
PS Example 2; SEQ ID NO 1983; 60pp + Sequence Listing; English.
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office
XX
SQ Sequence 17 BP; 2 A; 8 C; 6 G; 1 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1662 CCCTCACAGGGCAGCCC 1678
              ||||||| ||| |||||
Db          1 CCCTCACGGGGGAGCCC 17
```

RESULT 1330
ABK56437
ID ABK56437 standard; RNA; 17 BP.
XX
AC ABK56437;
XX
DT 02-JUL-2002 (first entry)
XX
DE Human CLCA1 gene enzymatic nucleic acid #808.
XX
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.
XX
OS Homo sapiens.
XX
PN WO200211674-A2.
XX
PD 14-FEB-2002.
XX
PF 09-AUG-2001; 2001WO-US024970.
XX
PR 09-AUG-2000; 2000US-0224383P.
XX
PA (RIBO-) RIBOZYME PHARM INC.

```
PA   (SYNT ) SYNTEX USA LLC.
PA   (THOM/) THOMPSON J.
XX
PI   Thompson J,  Mcswiggen J,  Mckenzie T,  Ayers D,  Szymkowski DE;
PI   Grupe A;
XX
DR   WPI; 2002-217145/27.
XX
PT   Enzymatic polynucleotide that down regulates expression of chloride
PT   channel calcium activated gene, useful for treating Chronic obstructive
PT   pulmonary disease (COPD), chronic bronchitis and asthma.
XX
PS   Claim 4; Page 70; 152pp; English.
XX
CC   The invention relates to enzymatic nucleic acid molecules that down
CC   regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC   by cleaving RNA derived from the genes. The nucleic acid sequences are
CC   useful as pharmaceutical agents for treating conditions such as chronic
CC   obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC   fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC   that are related to or will respond to the levels of CLCA1 in a cell or
CC   tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC   hence, are useful for treatment of a patient having a condition
CC   associated with the level of CLCA1, where the invention further comprises
CC   the use of one or more therapies under conditions suitable for the
CC   treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC   antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC   nucleic acids of the invention are also used as diagnostic tools to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of CLCA1 RNA in a cell. This sequence represents an
CC   enzymatic nucleic acid molecule of the invention
XX
SQ   Sequence 17 BP; 6 A; 5 C; 4 G; 0 T; 2 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   76.5%;  Pred. No. 9e+02;
  Matches   13;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1571 ACTCAGGCAGGCCAGCT 1587
              | :|| ||||||||||:
Db          1 AAUCAAGCAGGCCAGCU 17


RESULT 1331
ABK57127
ID   ABK57127 standard; RNA; 17 BP.
XX
AC   ABK57127;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human CLCA1 gene enzymatic nucleic acid #1498.
XX
KW   Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW   antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW   chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW   oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW   acetylcysteine.
XX
OS   Homo sapiens.
XX
PN   WO200211674-A2.
XX
PD   14-FEB-2002.
XX
PF   09-AUG-2001; 2001WO-US024970.
XX
PR   09-AUG-2000; 2000US-0224383P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (SYNT ) SYNTEX USA LLC.
PA   (THOM/) THOMPSON J.
XX
PI   Thompson J,  Mcswiggen J,  Mckenzie T,  Ayers D,  Szymkowski DE;
PI   Grupe A;
XX
DR   WPI; 2002-217145/27.
XX
PT   Enzymatic polynucleotide that down regulates expression of chloride
PT   channel calcium activated gene, useful for treating Chronic obstructive
PT   pulmonary disease (COPD), chronic bronchitis and asthma.
XX
PS   Claim 4; Page 96; 152pp; English.
XX
CC   The invention relates to enzymatic nucleic acid molecules that down
CC   regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC   by cleaving RNA derived from the genes. The nucleic acid sequences are
CC   useful as pharmaceutical agents for treating conditions such as chronic
CC   obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC   fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC   that are related to or will respond to the levels of CLCA1 in a cell or
CC   tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC   hence, are useful for treatment of a patient having a condition
CC   associated with the level of CLCA1, where the invention further comprises
CC   the use of one or more therapies under conditions suitable for the
CC   treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC   antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC   nucleic acids of the invention are also used as diagnostic tools to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of CLCA1 RNA in a cell. This sequence represents an
CC   enzymatic nucleic acid molecule of the invention
XX
SQ   Sequence 17 BP; 6 A; 4 C; 5 G; 0 T; 2 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   76.5%;  Pred. No. 9e+02;
  Matches   13;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1569 TGACTCAGGCAGGCCAG 1585
              :|| :|| |||||||||
Db          1 UGAAUCAAGCAGGCCAG 17


RESULT 1332
ABK56438
ID   ABK56438 standard; RNA; 17 BP.
XX
AC   ABK56438;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human CLCA1 gene enzymatic nucleic acid #809.
XX
KW   Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW   antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW   chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW   oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW   acetylcysteine.
XX
OS   Homo sapiens.
XX
PN   WO200211674-A2.
XX
PD   14-FEB-2002.
XX
PF   09-AUG-2001; 2001WO-US024970.
XX
PR   09-AUG-2000; 2000US-0224383P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (SYNT ) SYNTEX USA LLC.
PA   (THOM/) THOMPSON J.
XX
PI   Thompson J,  Mcswiggen J,  Mckenzie T,  Ayers D,  Szymkowski DE;
PI   Grupe A;
XX
```

DR WPI; 2002-217145/27.
XX
PT Enzymatic polynucleotide that down regulates expression of chloride
PT channel calcium activated gene, useful for treating Chronic obstructive
PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX
PS Claim 4; Page 70; 152pp; English.
XX
CC The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
CC enzymatic nucleic acid molecule of the invention
XX
SQ Sequence 17 BP; 4 A; 5 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 9e+02;
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

Qy 1575 AGGCAGGCCAGCTTTCC 1591
|| |||||||||::: |
Db 1 AAGCAGGCCAGCUUUUC 17

RESULT 1333
ACN06742/c
ID ACN06742 standard; RNA; 17 BP.
XX
AC ACN06742;
XX
DT 22-APR-2004 (first entry)
XX
DE WNV Amberzyme substrate SEQ ID NO 6745.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN WO200268637-A2.
XX
PD 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
DR WPI; 2002-706994/76.
XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 6745; 495pp; English.
XX
CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
SQ Sequence 17 BP; 1 A; 2 C; 9 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 9e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 431 ACCATCCCCCACGCAAG 447
|||| |||||||||| |
Db 17 ACCAACCCCCACGCATG 1

RESULT 1334
ACN10397
ID ACN10397 standard; RNA; 17 BP.
XX
AC ACN10397;
XX
DT 22-APR-2004 (first entry)
XX
DE WNV minus strand Inozyme substrate SEQ ID NO 10400.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN WO200268637-A2.
XX
PD 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
DR WPI; 2002-706994/76.
XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 10400; 495pp; English.
XX
CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,

CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
SQ Sequence 17 BP; 5 A; 8 C; 2 G; 0 T; 2 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 9e+02;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

```
Qy        433 CATCCCCCACGCAAGAT 449
              || |||||||||| ||:
Db          1 CAACCCCCACGCAUGAU 17
```

RESULT 1335
ACN05558/c
ID ACN05558 standard; RNA; 17 BP.
XX
AC ACN05558;
XX
DT 22-APR-2004 (first entry)
XX
DE WNV Amberzyme substrate SEQ ID NO 5561.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN WO200268637-A2.
XX
PD 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
DR WPI; 2002-706994/76.
XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 5561; 495pp; English.
XX
CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
SQ Sequence 17 BP; 3 A; 2 C; 6 G; 0 T; 6 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 9e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        477 ATCACTACCAGCTGACA 493
              |||| ||||||| ||||
Db         17 ATCATTACCAGCCGACA 1
```

RESULT 1336
ACN03580/c
ID ACN03580 standard; RNA; 17 BP.
XX
AC ACN03580;
XX
DT 22-APR-2004 (first entry)
XX
DE WNV Zinzyme substrate SEQ ID NO 3583.
XX
KW WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW encephalitis; myocarditis; meningitis; infection; hepatitis;
KW liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW Amberzyme; Zinzyme; ss.
XX
OS West Nile Virus.
XX
PN WO200268637-A2.
XX
PD 06-SEP-2002.
XX
PF 19-OCT-2001; 2001WO-US048350.
XX
PR 20-OCT-2000; 2000US-0242411P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J A.
XX
PI Blatt L, Mcswiggen JA;
XX
DR WPI; 2002-706994/76.
XX
PT New nucleic acid molecule that modulates replication of West Nile Virus
PT (WNV), useful for treating a condition related to WNV infection e.g.
PT pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS Claim 23; SEQ ID NO 3583; 495pp; English.
XX
CC The invention relates to nucleic acid molecules that modulate replication
CC of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC treating a condition related to WNV infection e.g. pancreatitis,
CC encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC molecule is selected from the group of ribozymes consisting of
CC Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC nucleic acid molecules further comprise at least five ribose residues, at
CC least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC least three of the 5' terminal nucleotides and a 3' end modification of a
CC 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC in the specification. The present sequence is that of a nucleic acid
CC molecule of the invention
XX
SQ Sequence 17 BP; 4 A; 1 C; 8 G; 0 T; 4 U; 0 Other;

```
  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1491 TCCTGACACTACTTCCA 1507
              ||| |||||| ||||||
Db         17 TCCAGACACTCCTTCCA 1


RESULT 1337
ACN10758/c
ID   ACN10758 standard; RNA; 17 BP.
XX
AC   ACN10758;
XX
DT   22-APR-2004  (first entry)
XX
DE   WNV minus strand Inozyme substrate SEQ ID NO 10761.
XX
KW   WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW   virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW   encephalitis; myocarditis; meningitis; infection; hepatitis;
KW   liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW   Amberzyme; Zinzyme; ss.
XX
OS   West Nile Virus.
XX
PN   WO200268637-A2.
XX
PD   06-SEP-2002.
XX
PF   19-OCT-2001; 2001WO-US048350.
XX
PR   20-OCT-2000; 2000US-0242411P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J A.
XX
PI   Blatt L,  Mcswiggen JA;
XX
DR   WPI; 2002-706994/76.
XX
PT   New nucleic acid molecule that modulates replication of West Nile Virus
PT   (WNV), useful for treating a condition related to WNV infection e.g.
PT   pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS   Claim 23; SEQ ID NO 10761; 495pp; English.
XX
CC   The invention relates to nucleic acid molecules that modulate replication
CC   of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC   treating a condition related to WNV infection e.g. pancreatitis,
CC   encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC   liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC   molecule is selected from the group of ribozymes consisting of
CC   Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC   nucleic acid molecules further comprise at least five ribose residues, at
CC   least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC   least three of the 5' terminal nucleotides and a 3' end modification of a
CC   3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC   are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC   in the specification. The present sequence is that of a nucleic acid
CC   molecule of the invention
XX
SQ   Sequence 17 BP; 2 A; 2 C; 6 G; 0 T; 7 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        894 CATCAACATGCACAACG 910
              |||||||||||  ||||
Db         17 CATCAACATGCCAAACG 1


RESULT 1338
ACN13855/c
ID   ACN13855 standard; RNA; 17 BP.
XX
AC   ACN13855;
XX
DT   22-APR-2004  (first entry)
XX
DE   WNV minus strand DNAzyme substrate SEQ ID NO 13858.
XX
KW   WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW   virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW   encephalitis; myocarditis; meningitis; infection; hepatitis;
KW   liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW   Amberzyme; Zinzyme; ss.
XX
OS   West Nile Virus.
XX
PN   WO200268637-A2.
XX
PD   06-SEP-2002.
XX
PF   19-OCT-2001; 2001WO-US048350.
XX
PR   20-OCT-2000; 2000US-0242411P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J A.
XX
PI   Blatt L,  Mcswiggen JA;
XX
DR   WPI; 2002-706994/76.
XX
PT   New nucleic acid molecule that modulates replication of West Nile Virus
PT   (WNV), useful for treating a condition related to WNV infection e.g.
PT   pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS   Claim 23; SEQ ID NO 13858; 495pp; English.
XX
CC   The invention relates to nucleic acid molecules that modulate replication
CC   of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC   treating a condition related to WNV infection e.g. pancreatitis,
CC   encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC   liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC   molecule is selected from the group of ribozymes consisting of
CC   Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC   nucleic acid molecules further comprise at least five ribose residues, at
CC   least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC   least three of the 5' terminal nucleotides and a 3' end modification of a
CC   3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC   are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC   in the specification. The present sequence is that of a nucleic acid
CC   molecule of the invention
XX
SQ   Sequence 17 BP; 2 A; 3 C; 5 G; 0 T; 7 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        888 GAACATCATCAACATGC 904
              | ||| ||||||||||||
Db         17 GGACAACATCAACATGC 1


RESULT 1339
ACN12120
ID   ACN12120 standard; RNA; 17 BP.
XX
AC   ACN12120;
```

```
XX
DT   22-APR-2004  (first entry)
XX
DE   WNV minus strand Inozyme substrate SEQ ID NO 12123.
XX
KW   WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW   virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW   encephalitis; myocarditis; meningitis; infection; hepatitis;
KW   liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW   Amberzyme; Zinzyme; ss.
XX
OS   West Nile Virus.
XX
PN   WO200268637-A2.
XX
PD   06-SEP-2002.
XX
PF   19-OCT-2001; 2001WO-US048350.
XX
PR   20-OCT-2000; 2000US-0242411P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J A.
XX
PI   Blatt L,  Mcswiggen JA;
XX
DR   WPI; 2002-706994/76.
XX
PT   New nucleic acid molecule that modulates replication of West Nile Virus
PT   (WNV), useful for treating a condition related to WNV infection e.g.
PT   pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS   Claim 23; SEQ ID NO 12123; 495pp; English.
XX
CC   The invention relates to nucleic acid molecules that modulate replication
CC   of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC   treating a condition related to WNV infection e.g. pancreatitis,
CC   encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC   liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC   molecule is selected from the group of ribozymes consisting of
CC   Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC   nucleic acid molecules further comprise at least five ribose residues, at
CC   least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC   least three of the 5' terminal nucleotides and a 3' end modification of a
CC   3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC   are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC   in the specification. The present sequence is that of a nucleic acid
CC   molecule of the invention
XX
SQ   Sequence 17 BP; 6 A; 6 C; 2 G; 0 T; 3 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   76.5%;  Pred. No. 9e+02;
  Matches   13;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        477 ATCACTACCAGCTGACA 493
              |:|| :|||||| ||||
Db          1 AUCAUUACCAGCCGACA 17


RESULT 1340
ACN10395
ID   ACN10395 standard; RNA; 17 BP.
XX
AC   ACN10395;
XX
DT   22-APR-2004  (first entry)
XX
DE   WNV minus strand Inozyme substrate SEQ ID NO 10398.
XX
KW   WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW   virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW   encephalitis; myocarditis; meningitis; infection; hepatitis;
KW   liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW   Amberzyme; Zinzyme; ss.
XX
OS   West Nile Virus.
XX
PN   WO200268637-A2.
XX
PD   06-SEP-2002.
XX
PF   19-OCT-2001; 2001WO-US048350.
XX
PR   20-OCT-2000; 2000US-0242411P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J A.
XX
PI   Blatt L,  Mcswiggen JA;
XX
DR   WPI; 2002-706994/76.
XX
PT   New nucleic acid molecule that modulates replication of West Nile Virus
PT   (WNV), useful for treating a condition related to WNV infection e.g.
PT   pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS   Claim 23; SEQ ID NO 10398; 495pp; English.
XX
CC   The invention relates to nucleic acid molecules that modulate replication
CC   of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC   treating a condition related to WNV infection e.g. pancreatitis,
CC   encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC   liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC   molecule is selected from the group of ribozymes consisting of
CC   Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC   nucleic acid molecules further comprise at least five ribose residues, at
CC   least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC   least three of the 5' terminal nucleotides and a 3' end modification of a
CC   3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC   are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC   in the specification. The present sequence is that of a nucleic acid
CC   molecule of the invention
XX
SQ   Sequence 17 BP; 5 A; 9 C; 2 G; 0 T; 1 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        431 ACCATCCCCCACGCAAG 447
              |||| |||||||||| |
Db          1 ACCAACCCCCACGCAUG 17


RESULT 1341
ACN10396
ID   ACN10396 standard; RNA; 17 BP.
XX
AC   ACN10396;
XX
DT   22-APR-2004  (first entry)
XX
DE   WNV minus strand Inozyme substrate SEQ ID NO 10399.
XX
KW   WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW   virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW   encephalitis; myocarditis; meningitis; infection; hepatitis;
KW   liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW   Amberzyme; Zinzyme; ss.
XX
OS   West Nile Virus.
XX
PN   WO200268637-A2.
```

```
XX
PD   06-SEP-2002.
XX
PF   19-OCT-2001; 2001WO-US048350.
XX
PR   20-OCT-2000; 2000US-0242411P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J A.
XX
PI   Blatt L,  Mcswiggen JA;
XX
DR   WPI; 2002-706994/76.
XX
PT   New nucleic acid molecule that modulates replication of West Nile Virus
PT   (WNV), useful for treating a condition related to WNV infection e.g.
PT   pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS   Claim 23; SEQ ID NO 10399; 495pp; English.
XX
CC   The invention relates to nucleic acid molecules that modulate replication
CC   of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC   treating a condition related to WNV infection e.g. pancreatitis,
CC   encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC   liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC   molecule is selected from the group of ribozymes consisting of
CC   Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC   nucleic acid molecules further comprise at least five ribose residues, at
CC   least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC   least three of the 5' terminal nucleotides and a 3' end modification of a
CC   3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC   are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC   in the specification. The present sequence is that of a nucleic acid
CC   molecule of the invention
XX
SQ   Sequence 17 BP; 5 A; 9 C; 2 G; 0 T; 1 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        432 CCATCCCCCACGCAAGA 448
              ||| |||||||||| ||
Db          1 CCAACCCCCACGCAUGA 17


RESULT 1342
ACN10409/c
ID   ACN10409 standard; RNA; 17 BP.
XX
AC   ACN10409;
XX
DT   22-APR-2004  (first entry)
XX
DE   WNV minus strand Inozyme substrate SEQ ID NO 10412.
XX
KW   WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW   virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW   encephalitis; myocarditis; meningitis; infection; hepatitis;
KW   liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW   Amberzyme; Zinzyme; ss.
XX
OS   West Nile Virus.
XX
PN   WO200268637-A2.
XX
PD   06-SEP-2002.
XX
PF   19-OCT-2001; 2001WO-US048350.
XX
PR   20-OCT-2000; 2000US-0242411P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J A.
XX
PI   Blatt L,  Mcswiggen JA;
XX
DR   WPI; 2002-706994/76.
XX
PT   New nucleic acid molecule that modulates replication of West Nile Virus
PT   (WNV), useful for treating a condition related to WNV infection e.g.
PT   pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS   Claim 23; SEQ ID NO 10412; 495pp; English.
XX
CC   The invention relates to nucleic acid molecules that modulate replication
CC   of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC   treating a condition related to WNV infection e.g. pancreatitis,
CC   encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC   liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC   molecule is selected from the group of ribozymes consisting of
CC   Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC   nucleic acid molecules further comprise at least five ribose residues, at
CC   least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC   least three of the 5' terminal nucleotides and a 3' end modification of a
CC   3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC   are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC   in the specification. The present sequence is that of a nucleic acid
CC   molecule of the invention
XX
SQ   Sequence 17 BP; 4 A; 8 C; 1 G; 0 T; 4 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        596 GCTTTGGGAAACTGGAG 612
              ||||||||| | |||||
Db         17 GCTTTGGGAGAATGGAG 1


RESULT 1343
ACN01673
ID   ACN01673 standard; RNA; 17 BP.
XX
AC   ACN01673;
XX
DT   22-APR-2004  (first entry)
XX
DE   WNV Inozyme substrate SEQ ID NO 1663.
XX
KW   WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW   virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW   encephalitis; myocarditis; meningitis; infection; hepatitis;
KW   liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW   Amberzyme; Zinzyme; ss.
XX
OS   West Nile Virus.
XX
PN   WO200268637-A2.
XX
PD   06-SEP-2002.
XX
PF   19-OCT-2001; 2001WO-US048350.
XX
PR   20-OCT-2000; 2000US-0242411P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J A.
XX
PI   Blatt L,  Mcswiggen JA;
XX
DR   WPI; 2002-706994/76.
```

```
XX
PT   New nucleic acid molecule that modulates replication of West Nile Virus
PT   (WNV), useful for treating a condition related to WNV infection e.g.
PT   pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS   Claim 23; SEQ ID NO 1663; 495pp; English.
XX
CC   The invention relates to nucleic acid molecules that modulate replication
CC   of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC   treating a condition related to WNV infection e.g. pancreatitis,
CC   encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC   liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC   molecule is selected from the group of ribozymes consisting of
CC   Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC   nucleic acid molecules further comprise at least five ribose residues, at
CC   least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC   least three of the 5' terminal nucleotides and a 3' end modification of a
CC   3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC   are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC   in the specification. The present sequence is that of a nucleic acid
CC   molecule of the invention
XX
SQ   Sequence 17 BP; 5 A; 6 C; 2 G; 0 T; 4 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   64.7%;  Pred. No. 9e+02;
  Matches   11;  Conservative    4;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1136 ACTACTCCACTCAGATT 1152
              ||:||:|||| ||| ::
Db          1 ACUACUCCACACAGGUU 17


RESULT 1344
ACN06741/c
ID   ACN06741 standard; RNA; 17 BP.
XX
AC   ACN06741;
XX
DT   22-APR-2004  (first entry)
XX
DE   WNV Amberzyme substrate SEQ ID NO 6744.
XX
KW   WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW   virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW   encephalitis; myocarditis; meningitis; infection; hepatitis;
KW   liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW   Amberzyme; Zinzyme; ss.
XX
OS   West Nile Virus.
XX
PN   WO200268637-A2.
XX
PD   06-SEP-2002.
XX
PF   19-OCT-2001; 2001WO-US048350.
XX
PR   20-OCT-2000; 2000US-0242411P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J A.
XX
PI   Blatt L,  Mcswiggen JA;
XX
DR   WPI; 2002-706994/76.
XX
PT   New nucleic acid molecule that modulates replication of West Nile Virus
PT   (WNV), useful for treating a condition related to WNV infection e.g.
PT   pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS   Claim 23; SEQ ID NO 6744; 495pp; English.
XX
CC   The invention relates to nucleic acid molecules that modulate replication
CC   of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC   treating a condition related to WNV infection e.g. pancreatitis,
CC   encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC   liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC   molecule is selected from the group of ribozymes consisting of
CC   Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC   nucleic acid molecules further comprise at least five ribose residues, at
CC   least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC   least three of the 5' terminal nucleotides and a 3' end modification of a
CC   3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC   are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC   in the specification. The present sequence is that of a nucleic acid
CC   molecule of the invention
XX
SQ   Sequence 17 BP; 1 A; 2 C; 9 G; 0 T; 5 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        432 CCATCCCCCACGCAAGA 448
              ||| |||||||||| ||
Db         17 CCAACCCCCACGCATGA 1


RESULT 1345
ACN13435/c
ID   ACN13435 standard; RNA; 17 BP.
XX
AC   ACN13435;
XX
DT   22-APR-2004  (first entry)
XX
DE   WNV minus strand Zinzyme substrate SEQ ID NO 13438.
XX
KW   WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW   virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW   encephalitis; myocarditis; meningitis; infection; hepatitis;
KW   liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW   Amberzyme; Zinzyme; ss.
XX
OS   West Nile Virus.
XX
PN   WO200268637-A2.
XX
PD   06-SEP-2002.
XX
PF   19-OCT-2001; 2001WO-US048350.
XX
PR   20-OCT-2000; 2000US-0242411P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J A.
XX
PI   Blatt L,  Mcswiggen JA;
XX
DR   WPI; 2002-706994/76.
XX
PT   New nucleic acid molecule that modulates replication of West Nile Virus
PT   (WNV), useful for treating a condition related to WNV infection e.g.
PT   pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS   Claim 23; SEQ ID NO 13438; 495pp; English.
XX
CC   The invention relates to nucleic acid molecules that modulate replication
CC   of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC   treating a condition related to WNV infection e.g. pancreatitis,
CC   encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC   liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC   molecule is selected from the group of ribozymes consisting of
CC   Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
```

```
CC   nucleic acid molecules further comprise at least five ribose residues, at
CC   least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC   least three of the 5' terminal nucleotides and a 3' end modification of a
CC   3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC   are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC   in the specification. The present sequence is that of a nucleic acid
CC   molecule of the invention
XX
SQ   Sequence 17 BP; 4 A; 3 C; 6 G; 0 T; 4 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1137 CTACTCCACTCAGATTG 1153
              ||||||||| ||| |||
Db         17 CTACTCCACACAGGTTG 1


RESULT 1346
ADB03435
ID   ADB03435 standard; DNA; 17 BP.
XX
AC   ADB03435;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human MDZ7 scanning oligonucleotide SEQ ID 4421.
XX
KW   Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW   zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW   chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW   developmental disorder; ss.
XX
OS   Homo sapiens.
XX
PN   EP1281758-A2.
XX
PD   05-FEB-2003.
XX
PF   30-JUL-2002; 2002EP-00016874.
XX
PR   02-AUG-2001; 2001US-00922181.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M,  Gu Y,  Nguyen C;
XX
DR   WPI; 2003-423107/40.
XX
PT   New zinc finger-containing proteins and nucleic acids, useful in
PT   manufacturing a medicament for treating or preventing a disorder
PT   associated with decreased or increased expression or activity of MDZ3,
PT   MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS   Example 8; SEQ ID NO 4421; 103pp; English.
XX
CC   The present invention relates to novel human zinc finger-containing
CC   proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC   encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC   MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC   15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC   or in manufacturing a medicament for treating or preventing a disorder
CC   associated with decreased or increased expression or activity of MDZ3,
CC   MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC   acids and proteins are also useful for diagnosing or monitoring a disease
CC   caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC   acids can also be used as probes to detect and characterize gross
CC   alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC   useful in constructing microarrays for measuring gene expression. The
CC   proteins are useful as therapeutic agents for gene therapy or as
CC   vaccines. The present sequence was used to illustrate the invention.
XX
SQ   Sequence 17 BP; 0 A; 10 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        921 CCTGTTCCAGCTGCTCC 937
              ||||||| ||||| ||
Db          1 CCTGTTCCCGCTGCCCC 17


RESULT 1347
ABZ59905/c
ID   ABZ59905 standard; RNA; 17 BP.
XX
AC   ABZ59905;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human K-Ras DNAzyme substrate #17.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US016840.
XX
PR   29-MAY-2001; 2001US-0294140P.
PR   06-JUN-2001; 2001US-0296249P.
PR   10-SEP-2001; 2001US-0318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS   Claim 58; Page 85; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC   rheumatic activity. The nucleic acid molecules are useful for reducing
CC   HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC   also useful for treating breast, ovarian, colorectal, lung, prostate,
CC   bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC   shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC   ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC   ribozymes of the invention
XX
SQ   Sequence 17 BP; 2 A; 4 C; 9 G; 0 T; 2 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        559 AGCCGCCGCCTCCGTCG 575
              |||||||||| || |||
Db         17 AGCCGCCGCCACCTTCG 1
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```
RESULT 1348
ABZ65100
ID   ABZ65100 standard; RNA; 17 BP.
XX
AC   ABZ65100;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human HER2 DNAzyme substrate #557.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US016840.
XX
PR   29-MAY-2001; 2001US-0294140P.
PR   06-JUN-2001; 2001US-0296249P.
PR   10-SEP-2001; 2001US-0318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS   Claim 4; Page 143; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC   rheumatic activity. The nucleic acid molecules are useful for reducing
CC   HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC   also useful for treating breast, ovarian, colorectal, lung, prostate,
CC   bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC   shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC   ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC   ribozymes of the invention
XX
SQ   Sequence 17 BP; 6 A; 5 C; 4 G; 0 T; 2 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   76.5%;  Pred. No. 9e+02;
  Matches   13;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        654 CACCGTCTACAAAGGCA 670
              ||| |:|:|||| ||||
Db          1 CACAGUCUACAAGGGCA 17


RESULT 1349
ABZ62059/c
ID   ABZ62059 standard; RNA; 17 BP.
XX
AC   ABZ62059;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human H-Ras DNAzyme target #850.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US016840.
XX
PR   29-MAY-2001; 2001US-0294140P.
PR   06-JUN-2001; 2001US-0296249P.
PR   10-SEP-2001; 2001US-0318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS   Claim 58; Page 129; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC   rheumatic activity. The nucleic acid molecules are useful for reducing
CC   HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC   also useful for treating breast, ovarian, colorectal, lung, prostate,
CC   bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC   shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC   ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC   ribozymes of the invention
XX
SQ   Sequence 17 BP; 1 A; 6 C; 7 G; 0 T; 3 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1627 GGCCCCAGCAGGCAGCG 1643
              | ||||||||||||| |
Db         17 GCCCCCAGCAGGCAGTG 1


RESULT 1350
ACD59940
ID   ACD59940 standard; RNA; 17 BP.
XX
AC   ACD59940;
XX
DT   24-SEP-2003  (first entry)
XX
DE   HCV DNAzyme substrate sequence #1574.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO200281494-A1.
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```
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Claim 1; Page 262; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HCV
CC   DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC   invention
XX
SQ   Sequence 17 BP; 2 A; 2 C; 11 G; 0 T; 2 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   76.5%;  Pred. No. 9e+02;
  Matches   13;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        351 GGGGTCTGATGGGGAGA 367
              ||||:|:|  |||||||
Db          1 GGGGUCUGGCGGGGAGA 17


RESULT 1351
ACD58066/c
ID   ACD58066 standard; RNA; 17 BP.
XX
AC   ACD58066;
XX
DT   23-SEP-2003  (first entry)
XX
DE   HCV DNAzyme substrate sequence #652.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Claim 1; Page 245; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HCV
CC   DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC   invention
XX
SQ   Sequence 17 BP; 2 A; 7 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1432 GCAGAGGATGCCATGAA 1448
              | ||||||||||||| |
Db         17 GGAGAGGATGCCATGCA 1
```

```
RESULT 1352
ACC68725/c
ID   ACC68725 standard; DNA; 17 BP.
XX
AC   ACC68725;
XX
DT   01-JUL-2003  (first entry)
XX
DE   Murine oligonucleotide associated with tumour supression, SEQ ID 5972.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW   tumour suppression; tumour reversion; apoptosis; virus resistance;
KW   viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; ss.
XX
OS   Mus musculus.
XX
PN   WO2003025176-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004210.
XX
PR   17-SEP-2001; 2001FR-00011979.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-333167/31.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 729; 738pp; French.
XX
CC   The present invention relates to murine oligonucleotides (ACC62754-
CC   ACC68806), which are associated with tumour suppression, tumour
CC   reversion, apoptosis and virus resistance. The oligonucleotides are
CC   useful as (1) as probes and primers for detecting, identifying,
CC   quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC   gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC   recombinant polypeptides. The oligonucleotides are useful for preparation
CC   of pharmaceuticals for prevention and/or treatment of viral diseases that
CC   are characterised by development of tumours or cell degeneration,
CC   specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ   Sequence 17 BP; 2 A; 11 C; 2 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1466 GTCTGGGGGAGCGGATC 1482
              | ||||||||| |||||
Db         17 GGCTGGGGGAGGGGATC 1


RESULT 1353
ACC68431
ID   ACC68431 standard; DNA; 17 BP.
XX
AC   ACC68431;
XX
DT   01-JUL-2003  (first entry)
XX
DE   Murine oligonucleotide associated with tumour supression, SEQ ID 5678.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW   tumour suppression; tumour reversion; apoptosis; virus resistance;
KW   viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; ss.
XX
OS   Mus musculus.
XX
PN   WO2003025176-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004210.
XX
PR   17-SEP-2001; 2001FR-00011979.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-333167/31.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 694; 738pp; French.
XX
CC   The present invention relates to murine oligonucleotides (ACC62754-
CC   ACC68806), which are associated with tumour suppression, tumour
CC   reversion, apoptosis and virus resistance. The oligonucleotides are
CC   useful as (1) as probes and primers for detecting, identifying,
CC   quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC   gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC   recombinant polypeptides. The oligonucleotides are useful for preparation
CC   of pharmaceuticals for prevention and/or treatment of viral diseases that
CC   are characterised by development of tumours or cell degeneration,
CC   specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ   Sequence 17 BP; 5 A; 7 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1479 GATCCACAAACTTCCTG 1495
              ||||| ||||| |||||
Db          1 GATCCCCAAACATCCTG 17


RESULT 1354
ADB42535
ID   ADB42535 standard; DNA; 17 BP.
XX
AC   ADB42535;
XX
DT   18-DEC-2003  (revised)
DT   04-DEC-2003  (first entry)
XX
DE   Tumour suppression/reversion associated nucleotide #2858.
XX
KW   cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW   primer; probe; tumour suppression; tumour reversion; apoptosis;
KW   virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW   diagnosis.
XX
OS   Homo sapiens.
XX
PN   WO2003040369-A2.
XX
PD   15-MAY-2003.
XX
PF   17-SEP-2002; 2002WO-IB004219.
XX
PR   17-SEP-2001; 2001FR-00011981.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
```

PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 366; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 7 A; 2 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 9e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 127 GATCGGATGAAGAAGAT 143
||||||| | |||||||
Db 1 GATCGGAAGCAGAAGAT 17

RESULT 1355
ADC03574
ID ADC03574 standard; DNA; 17 BP.
XX
AC ADC03574;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human Na/H exchanger-like protein 1 gene oligonucleotide #21.
XX
KW ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
KW NHELP1; passive replacement therapy; vaccine; diagnosis.
XX
OS Homo sapiens.
XX
PN EP1273660-A2.
XX
PD 08-JAN-2003.
XX
PF 25-JAN-2002; 2002EP-00001160.
XX
PR 30-JAN-2001; 2001WO-US000666.
PR 23-MAY-2001; 2001US-00864761.
PR 21-DEC-2001; 2001US-0343331P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y;
XX
DR WPI; 2003-302724/30.
XX
PT New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a
PT passive replacement therapy or as a vaccine for treating or preventing
PT disorders associated with aberrant expression or activity of human
PT NHELP1.
XX
PS Example 2; SEQ ID NO 61; 468pp; English.
XX
CC The invention relates to a nucleic acid molecule which encodes a Na+/H+
CC exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1
CC polypeptide, an antibody against the protein or its antigen-binding
CC fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1
CC polypeptide and an agonist are particularly useful for manufacturing a
CC medicament for treating or preventing a disorder associated with
CC decreased expression or activity of human NHELP1. The antibody or its
CC antigen-binding fragment, and an antagonist, are useful for manufacturing
CC a medicament for treating or preventing a disorder associated with
CC increased expression or activity of human NHELP1. The NHELP1 nucleic acid
CC or protein is useful as passive replacement therapy, as a vaccine, or in
CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
CC spanning the sequence of the human NHELP1 gene (ADC03514).
XX
SQ Sequence 17 BP; 7 A; 4 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 9e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1251 TATCTTAGGAACCCCAA 1267
||||| ||||| |||||
Db 1 TATCTAAGGAATCCCAA 17

RESULT 1356
ADI48635/c
ID ADI48635 standard; DNA; 17 BP.
XX
AC ADI48635;
XX
DT 15-APR-2004 (first entry)
XX
DE Human tumour suppression/reversion-related DNA sequence SeqID1138.
XX
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe;
KW primer; PCR; gene chip; antisense; viral disease; tumour;
KW cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.
XX
OS Homo sapiens.
XX
PN WO2003025177-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004523.
XX
PR 17-SEP-2001; 2001FR-00011980.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313354/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; SEQ ID NO 1138; 30pp; French.
XX
CC This invention relates to novel isolated nucleic acid sequences involved
CC in the phenomena of tumour suppression, tumour reversion, apoptosis
CC and/or resistance to viruses. The invention may be useful for the
CC development of compounds with a cytostatic, virucide, neuroprotective,

```
CC   nootropic or neuroleptic activity. The DNA sequences may be useful as
CC   probes and primers for detecting, indentifying, quantifying and/or
CC   amplifying nucleic acid, for example as one component of a gene chip, in
CC   vitro as antisense reagents and for production of recombinant
CC   polypeptides. The invention may therefore be useful for preparation of
CC   pharmaceuticals for prevention and/or treatment of viral diseases that
CC   are characterised by development of tumours or cell degeneration,
CC   specifically cancer but also Alzheimer's disease and schizophrenia. The
CC   present sequence is that of a nucleic acid sequence of the invention.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/publishedpct_sequences
XX
SQ   Sequence 17 BP; 4 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        195 CAATGGTGCCCCTGAGC 211
              ||||| ||||||||| |
Db         17 CAATGATGCCCCTGATC 1


RESULT 1357
ADI49956/c
ID   ADI49956 standard; DNA; 17 BP.
XX
AC   ADI49956;
XX
DT   15-APR-2004  (first entry)
XX
DE   Human tumour suppression/reversion-related DNA sequence SeqID2459.
XX
KW   tumour suppression; tumour reversion; apoptosis; virus resistance;
KW   cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe;
KW   primer; PCR; gene chip; antisense; viral disease; tumour;
KW   cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.
XX
OS   Homo sapiens.
XX
PN   WO2003025177-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004523.
XX
PR   17-SEP-2001; 2001FR-00011980.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313354/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; SEQ ID NO 2459; 30pp; French.
XX
CC   This invention relates to novel isolated nucleic acid sequences involved
CC   in the phenomena of tumour suppression, tumour reversion, apoptosis
CC   and/or resistance to viruses. The invention may be useful for the
CC   development of compounds with a cytostatic, virucide, neuroprotective,
CC   nootropic or neuroleptic activity. The DNA sequences may be useful as
CC   probes and primers for detecting, indentifying, quantifying and/or
CC   amplifying nucleic acid, for example as one component of a gene chip, in
CC   vitro as antisense reagents and for production of recombinant
CC   polypeptides. The invention may therefore be useful for preparation of
CC   pharmaceuticals for prevention and/or treatment of viral diseases that
CC   are characterised by development of tumours or cell degeneration,
CC   specifically cancer but also Alzheimer's disease and schizophrenia. The
CC   present sequence is that of a nucleic acid sequence of the invention.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/publishedpct_sequences
XX
SQ   Sequence 17 BP; 3 A; 5 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1412 AGGGTCGAAATCGGATC 1428
              |||||  ||||||||||
Db         17 AGGGTAAAAATCGGATC 1


RESULT 1358
ADL51894
ID   ADL51894 standard; RNA; 17 BP.
XX
AC   ADL51894;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human PTGDR substrate sequence #1013.
XX
KW   antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW   prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW   protein kinase PKR; cerebrovascular accident;
KW   central nervous system injury; CNS injury; spinal cord injury; cancer;
KW   melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW   restenosis; asthma; Crohn's disease; diabetes; obesity;
KW   autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW   graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW   allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR;
KW   substrate; ds.
XX
OS   Unidentified.
XX
PN   WO200281628-A2.
XX
PD   17-OCT-2002.
XX
PF   03-APR-2002; 2002WO-US010512.
XX
PR   05-APR-2001; 2001US-00827395.
PR   29-MAY-2001; 2001US-0294412P.
PR   28-AUG-2001; 2001US-0315315P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Chowrira B,  Haeberli P,  Mcswiggen J,  Fosnaugh K;
XX
DR   WPI; 2003-058513/05.
XX
PT   Novel enzymatic nucleic acid that down-regulates expression of neurite
PT   growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT   protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
PS   Claim 161; SEQ ID NO 5427; 317pp; English.
XX
CC   The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC   that down regulate the expression or inhibit the function of a receptor
CC   for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC   IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC   invention are useful for treating: cerebrovascular accident, central
CC   nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC   lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC   restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC   disease, lupus, multiple sclerosis, transplant/graft rejection,
CC   ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC   conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC   nucleic acids of the invention are also useful for down-regulating the
```

CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human PKR
CC substrate sequence.
XX
SQ Sequence 17 BP; 3 A; 5 C; 6 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 9e+02;
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

```
Qy        317 CTGCACCAGAGATTGTG 333
              |:|||||| || :|:|
Db          1 CUGCACCAGGGACUGUG 17
```

RESULT 1359
ADL47099
ID ADL47099 standard; RNA; 17 BP.
XX
AC ADL47099;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human NOGO receptor zinzyme substrate sequence #86.
XX
KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis;
KW NOGO receptor zinzyme; substrate; ds.
XX
OS Unidentified.
XX
PN WO200281628-A2.
XX
PD 17-OCT-2002.
XX
PF 03-APR-2002; 2002WO-US010512.
XX
PR 05-APR-2001; 2001US-00827395.
PR 29-MAY-2001; 2001US-0294412P.
PR 28-AUG-2001; 2001US-0315315P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Chowrira B, Haeberli P, Mcswiggen J, Fosnaugh K;
XX
DR WPI; 2003-058513/05.
XX
PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
PS Claim 9; SEQ ID NO 632; 317pp; English.
XX
CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the

CC expression of a target gene and as a diagnostic tool to examine genetic
CC drifts and mutations within diseased cells or to detect the presence of a
CC target RNA in a cell. The present RNA sequence represents a human NOGO
CC receptor zinzyme substrate sequence.
XX
SQ Sequence 17 BP; 0 A; 6 C; 7 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 17;
Best Local Similarity 70.6%; Pred. No. 9e+02;
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

```
Qy        930 GCTGCTCCGTGGCCTGG 946
              ||:| :||| ||||:||
Db          1 GCUGUUCCGCGGCCUGG 17
```

RESULT 1360
ADL47974/c
ID ADL47974 standard; RNA; 17 BP.
XX
AC ADL47974;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human IKK-gamma substrate sequence #484.
XX
KW antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW protein kinase PKR; cerebrovascular accident;
KW central nervous system injury; CNS injury; spinal cord injury; cancer;
KW melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW restenosis; asthma; Crohn's disease; diabetes; obesity;
KW autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma;
KW substrate; ds.
XX
OS Unidentified.
XX
PN WO200281628-A2.
XX
PD 17-OCT-2002.
XX
PF 03-APR-2002; 2002WO-US010512.
XX
PR 05-APR-2001; 2001US-00827395.
PR 29-MAY-2001; 2001US-0294412P.
PR 28-AUG-2001; 2001US-0315315P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Chowrira B, Haeberli P, Mcswiggen J, Fosnaugh K;
XX
DR WPI; 2003-058513/05.
XX
PT Novel enzymatic nucleic acid that down-regulates expression of neurite
PT growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
PS Claim 59; SEQ ID NO 1507; 317pp; English.
XX
CC The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC that down regulate the expression or inhibit the function of a receptor
CC for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC invention are useful for treating: cerebrovascular accident, central
CC nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC disease, lupus, multiple sclerosis, transplant/graft rejection,
CC ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC nucleic acids of the invention are also useful for down-regulating the

```
CC   expression of a target gene and as a diagnostic tool to examine genetic
CC   drifts and mutations within diseased cells or to detect the presence of a
CC   target RNA in a cell. The present RNA sequence represents a human IKK-
CC   gamma substrate sequence.
XX
SQ   Sequence 17 BP; 1 A; 11 C; 1 G; 0 T; 4 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         30 GCAGAGGTAGGCAGGAG 46
              | ||||||||||||| |
Db         17 GGAGAGGTAGGCAGGGG 1


RESULT 1361
ADL51895
ID   ADL51895 standard; RNA; 17 BP.
XX
AC   ADL51895;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human PTGDR substrate sequence #1014.
XX
KW   antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW   prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW   protein kinase PKR; cerebrovascular accident;
KW   central nervous system injury; CNS injury; spinal cord injury; cancer;
KW   melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW   restenosis; asthma; Crohn's disease; diabetes; obesity;
KW   autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW   graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW   allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR;
KW   substrate; ds.
XX
OS   Unidentified.
XX
PN   WO200281628-A2.
XX
PD   17-OCT-2002.
XX
PF   03-APR-2002; 2002WO-US010512.
XX
PR   05-APR-2001; 2001US-00827395.
PR   29-MAY-2001; 2001US-0294412P.
PR   28-AUG-2001; 2001US-0315315P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Chowrira B,  Haeberli P,  Mcswiggen J,  Fosnaugh K;
XX
DR   WPI; 2003-058513/05.
XX
PT   Novel enzymatic nucleic acid that down-regulates expression of neurite
PT   growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT   protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
PS   Claim 161; SEQ ID NO 5428; 317pp; English.
XX
CC   The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC   that down regulate the expression or inhibit the function of a receptor
CC   for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC   IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC   invention are useful for treating: cerebrovascular accident, central
CC   nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC   lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC   restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC   disease, lupus, multiple sclerosis, transplant/graft rejection,
CC   ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC   conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC   nucleic acids of the invention are also useful for down-regulating the
CC   expression of a target gene and as a diagnostic tool to examine genetic
CC   drifts and mutations within diseased cells or to detect the presence of a
CC   target RNA in a cell. The present RNA sequence represents a human PKR
CC   substrate sequence.
XX
SQ   Sequence 17 BP; 3 A; 5 C; 6 G; 0 T; 3 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   70.6%;  Pred. No. 9e+02;
  Matches   12;  Conservative    3;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        318 TGCACCAGAGATTGTGC 334
              :|||||| || :|:||
Db          1 UGCACCAGGGACUGUGC 17


RESULT 1362
ADI84328
ID   ADI84328 standard; RNA; 17 BP.
XX
AC   ADI84328;
XX
DT   03-JUN-2004  (first entry)
XX
DE   HCV DNAzyme substrate sequence #1574.
XX
KW   ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
KW   HCV infection; type I interferon; DNAzyme.
XX
OS   Hepatitis C virus.
XX
PN   US2003125270-A1.
XX
PD   03-JUL-2003.
XX
PF   18-DEC-2000; 2000US-00740332.
XX
PR   18-DEC-2000; 2000US-00740332.
XX
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (ROBE/) ROBERTS E.
PA   (PAVC/) PAVCO P A.
PA   (MACE/) MACEJACK D.
XX
PI   Blatt L,  Mcswiggen J,  Roberts E,  Pavco PA,  Macejack D;
XX
DR   WPI; 2004-031273/03.
XX
PT   Enzymatic nucleic acid molecules which specifically cleave RNA derived
PT   from hepatitis C virus (HCV), useful for the treatment of HCV infections,
PT   especially in combination with type I interferon therapy.
XX
PS   Claim 1; SEQ ID NO 1574; 198pp; English.
XX
CC   The invention relates to an enzymatic nucleic acid molecule which
CC   specifically cleaves RNA derived from hepatitis C virus (HCV), in which
CC   the binding arms of the enzymatic nucleic acid molecule comprises
CC   sequences complementary to any of the defined substrate sequences given
CC   in the specification. The nucleic acid molecule may be administered for
CC   the treatment of HCV infections, especially in combination with type I
CC   interferons. The present sequence represents a HCV DNAzyme substrate
CC   sequence.
XX
SQ   Sequence 17 BP; 2 A; 2 C; 11 G; 0 T; 2 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   76.5%;  Pred. No. 9e+02;
  Matches   13;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        351 GGGGTCTGATGGGGAGA 367
              ||||:|:|  |||||||
Db          1 GGGGUCUGGCGGGGAGA 17
```

```
RESULT 1363
ADI83406/c
ID   ADI83406 standard; RNA; 17 BP.
XX
AC   ADI83406;
XX
DT   03-JUN-2004  (first entry)
XX
DE   HCV DNAzyme substrate sequence #652.
XX
KW   ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
KW   HCV infection; type I interferon; DNAzyme.
XX
OS   Hepatitis C virus.
XX
PN   US2003125270-A1.
XX
PD   03-JUL-2003.
XX
PF   18-DEC-2000; 2000US-00740332.
XX
PR   18-DEC-2000; 2000US-00740332.
XX
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (ROBE/) ROBERTS E.
PA   (PAVC/) PAVCO P A.
PA   (MACE/) MACEJACK D.
XX
PI   Blatt L,  Mcswiggen J,  Roberts E,  Pavco PA,  Macejack D;
XX
DR   WPI; 2004-031273/03.
XX
PT   Enzymatic nucleic acid molecules which specifically cleave RNA derived
PT   from hepatitis C virus (HCV), useful for the treatment of HCV infections,
PT   especially in combination with type I interferon therapy.
XX
PS   Claim 1; SEQ ID NO 652; 198pp; English.
XX
CC   The invention relates to an enzymatic nucleic acid molecule which
CC   specifically cleaves RNA derived from hepatitis C virus (HCV), in which
CC   the binding arms of the enzymatic nucleic acid molecule comprises
CC   sequences complementary to any of the defined substrate sequences given
CC   in the specification. The nucleic acid molecule may be administered for
CC   the treatment of HCV infections, especially in combination with type I
CC   interferons. The present sequence represents a HCV DNAzyme substrate
CC   sequence.
XX
SQ   Sequence 17 BP; 2 A; 8 C; 2 G; 0 T; 5 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1432 GCAGAGGATGCCATGAA 1448
              | ||||||||||||| |
Db         17 GGAGAGGATGCCATGGA 1


RESULT 1364
ADP46413/c
ID   ADP46413 standard; DNA; 17 BP.
XX
AC   ADP46413;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Extend primer 89 used to genotype human ICAM-1/ICAM-4/ICAM-5 SNP.
XX
KW   breast cancer; cytostatic; gene therapy; human;
KW   intercellular adhesion molecule; ICAM-1; human rhinovirus receptor; BB2;
KW   CD54; cell surface glycoprotein P3.58; ICAM-4;
KW   Landsteiner-Wiener blood group; ICAM-5; telencephalin; chromosome 19p13;
KW   ss; primer; PCR; SNP; single nucleotide polymorphism; probe.
XX
OS   Homo sapiens.
XX
PN   WO2004047623-A2.
XX
PD   10-JUN-2004.
XX
PF   25-NOV-2003; 2003WO-US037948.
XX
PR   25-NOV-2002; 2002US-0429136P.
PR   24-JUL-2003; 2003US-0490234P.
XX
PA   (SEQU-) SEQUENOM INC.
XX
PI   Roth RB,  Nelson MR,  Braun A,  Kammerer SM,  Reneland R;
XX
DR   WPI; 2004-441051/41.
XX
PT   Identifying a subject at risk of breast cancer by detecting the presence
PT   of polymorphic variations in the ICAM, MAPK10, KIAA0861, NUMA1 or GALE
PT   regions which are associated with breast cancer in a nucleic acid sample
PT   from a subject.
XX
PS   Example 4; Page 84; 289pp; English.
XX
CC   The invention relates to a novel method for identifying a subject at risk
CC   of breast cancer comprising detecting the presence or absence of one or
CC   more polymorphic variations associated with breast cancer in a nucleic
CC   acid sample from a subject. The method of the invention has cytostatic
CC   applications and may be useful for identifying a subject at risk of
CC   breast cancer, for early diagnosis, prevention and treatment of breast
CC   cancer, possibly via gene therapy, as well as to analyse and predict a
CC   response to a breast cancer treatment and in clinical drug trials. The
CC   current sequence is that of an Extend primer (also described as probe) of
CC   the invention which was used to genotype human intercellular adhesion
CC   molecule ICAM-1/ICAM-4/ICAM-5 gDNA. ICAM-1 (human rhinovirus receptor;BB2
CC   ;CD54;cell surface glycoprotein P3.58) has been mapped to chromosomal
CC   position 19p13.3-p13.2, ICAM-4 (Landsteiner-Wiener blood group;LW) has
CC   been mapped to chromosomal position 19p13.2-cen and ICAM-5
CC   (telencephalin) has been mapped to chromosomal position 19p13.2.
XX
SQ   Sequence 17 BP; 3 A; 2 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 9e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1348 TTGAGCCACGCACCCCG 1364
              |||| |||| |||||||
Db         17 TTGATCCACCCACCCCG 1


RESULT 1365
AAZ57670/c
ID   AAZ57670 standard; DNA; 18 BP.
XX
AC   AAZ57670;
XX
DT   05-APR-2000  (first entry)
XX
DE   Human G-alpha-12 antisense inhibitor ISIS# 20658.
XX
KW   G-alpha-12 inhibitor; antisense compound; cell differentiation; cancer;
KW   cell growth; metastatic growth; ss; ISIS# 20658.
XX
OS   Homo sapiens.
XX
PN   US5998206-A.
XX
PD   07-DEC-1999.
```

```
XX
PF   23-FEB-1999;   99US-00256496.
XX
PR   23-FEB-1999;   99US-00256496.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Cowsert LM;
XX
DR   WPI; 2000-095920/08.
XX
PT   Antisense inhibition of human G-alpha-12 expression.
XX
PS   Example 15; Col 38; 36pp; English.
XX
CC   This is a human G-alpha-12 antisense nucleotide sequence. G-alpha-12 is a
CC   member of the G12/13 subfamily of G-proteins. The primary function of G-
CC   alpha-12 is in cell differentiation and growth. The invention relates to
CC   antisense compounds which are 8-30 nucleotides long (see AAZ57668-
CC   Z57746). The antisense molecules are targeted to the human G-alpha-12
CC   nucleic acid molecule, and inhibit the expression of G-alpha-12. The
CC   molecules preferably have a modified internucleotide linkage, and at
CC   least one modified sugar moiety. The compounds target different regions
CC   of the human G-alpha-12 RNA. The expression of human G-alpha 12 is
CC   inhibited by contacting human cells or tissues in vitro with the
CC   antisense molecules. The oligonucleotides are used in modulating the
CC   function of nucleic acid molecules encoding G-alpha-12, ultimately
CC   modulating the amount of G-alpha-12 produced. The antisense compounds can
CC   be utilized for diagnostics, therapeutics, prophylaxis and as research
CC   agents and kits. They may be useful in the treatment of cancer, and
CC   metastatic growth
XX
SQ   Sequence 18 BP; 4 A; 4 C; 9 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        555 CCTCAGCCGCCGCCTCC 571
              ||||||||||| |||| |
Db         18 CCTCAGCCGCTGCCTGC 2


RESULT 1366
AAQ03964
ID   AAQ03964 standard; DNA; 18 BP.
XX
AC   AAQ03964;
XX
DT   22-AUG-1990  (first entry)
XX
DE   Herpes simplex virus replication inhibitor 294.
XX
KW   Herpes simplex virus; HSV; herpes; transactivating protein; TAP; ss.
XX
OS   Synthetic.
XX
PN   EP363059-A.
XX
PD   11-APR-1990.
XX
PF   26-SEP-1989;   89EP-00309754.
XX
PR   30-SEP-1988;   88US-00252225.
XX
PA   (SCHE ) SCHERING CORP.
XX
PI   Draper KG;
XX
DR   WPI; 1990-109387/15.
XX
PT   Inhibitor of herpes simplex virus replication - comprising oligomer
PT   complementary to initiation region of mRNA coding for HSV trans-
PT   activating protein.
XX
PS   Disclosure; Fig 1; 17pp; English.
XX
CC   Oligomer hybridises to the transactivating protein region of the HSV
CC   genome blocking successful replication. Useful in prevention and
CC   treatment of infected cells
XX
SQ   Sequence 18 BP; 4 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        505 GAGGGCTACCTGGAGAA 521
              | ||| ||||||||||||
Db          1 GTGGGTTACCTGGAGAA 17


RESULT 1367
AAT11975/c
ID   AAT11975 standard; DNA; 18 BP.
XX
AC   AAT11975;
XX
DT   25-MAR-2003  (revised)
DT   13-MAR-1996  (first entry)
XX
DE   CMV antisense oligonucleotide (ISIS 5479).
XX
KW   antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
KW   intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .18
FT                    /*tag=  a
FT                    /note= "phosphorothioate backbone"
XX
PN   US5442049-A.
XX
PD   15-AUG-1995.
XX
PF   25-JAN-1993;   93US-00009263.
XX
PR   19-NOV-1992;   92US-00927506.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Baker B,  Draper K,  Anderson K;
XX
DR   WPI; 1995-292538/38.
XX
PT   New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
PT   a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
PT   treatment of CMV diseases.
XX
PS   Example 10; Col 17; 66pp; English.
XX
CC   AAT11971-84 are antisense oligonucleotides (ONs) against human
CC   cytomegalovirus (CMV) that displayed activities of at least 50 % of
CC   control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal
CC   mismatches could be tolerated without loss of antiviral activity.
CC   Antisense ONs targeting CMV DNA or RNA coding for the IE1, IE2 or DNA
CC   polymerase proteins have been shown to be effective in therapy,
CC   prophylaxis and diagnosis of CMV infection. The ONs may be modified to
CC   reduce nuclease resistance and to increase their efficacy. Modifications
CC   include phosphorothioate backbones, alkyl and halogen-substituted sugar
CC   moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF
CC   field.)
XX
SQ   Sequence 18 BP; 0 A; 5 C; 3 G; 10 T; 0 U; 0 Other;
```

```
  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        133 ATGAAGAAGATCAAACG 149
              | ||||||||| ||||||
Db         18 AAGAAGAAGAGCAAACG 2


RESULT 1368
AAT01677/c
ID   AAT01677 standard; DNA; 18 BP.
XX
AC   AAT01677;
XX
DT   17-DEC-1995  (first entry)
XX
DE   Peptide nucleic acid targetting CMV IE2 nuc sig 2.
XX
KW   peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
KW   antiviral; diagnostic; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    1. .18
FT                   /*tag=  a
FT                   /note= "at least one (and preferably all) of the backbone
FT                   subunits are composed of amide units, so that the
FT                   oligomer consists of the nucleobases attached covalently
FT                   to a polyamide backbone"
XX
PN   WO9504748-A1.
XX
PD   16-FEB-1995.
XX
PF   09-AUG-1994;   94WO-US009039.
XX
PR   09-AUG-1993;   93US-00104438.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Anderson KP,  Crooke ST,  Mirabelli CK,  Ecker DJ,  Cowsert LM;
XX
DR   WPI; 1995-090841/12.
XX
PT   New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
PT   papilloma:virus - are stable anti:sense molecules with high affinity for
PT   single stranded DNA, used for treating infections.
XX
PS   Claim 2; Page 44; 65pp; English.
XX
CC   New oligomers are claimed which (A) have at least one peptide nucleic
CC   acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'
CC   untranslated region, intron/exon (I/E) junction or coding sequence of
CC   cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or
CC   hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a
CC   papillomavirus. The PNAs can be used to target RNA and single stranded
CC   DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence
CC   they may be used therapeutically for modulating cytomegalovirus and
CC   papillomavirus processes and also as diagnostics (e.g., as probes for
CC   specific mRNAs). PNA oligomers have high affinity for complementary
CC   single stranded DNA. They are also able to form triple helices in which a
CC   first PNA strand binds with RNA or ssDNA and a second PNA strand binds
CC   with the resulting double helix or with the first PNA strand. The PNAs
CC   possess no significant charge and are water soluble, which facilitates
CC   cellular uptake. Futher, since they contain amides of non-biological
CC   amino acids, they are biostable and resistant to enzymatic degradation by
CC   proteases. The present sequence targets CMV IE2 nuclear localisation
CC   signal 2
XX
SQ   Sequence 18 BP; 0 A; 5 C; 3 G; 10 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        133 ATGAAGAAGATCAAACG 149
              | ||||||||| ||||||
Db         18 AAGAAGAAGAGCAAACG 2


RESULT 1369
AAX73494
ID   AAX73494 standard; RNA; 18 BP.
XX
AC   AAX73494;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flk-1 VEGF receptor hairpin ribozyme substrate #41.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 152; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 18 BP; 1 A; 6 C; 7 G; 0 T; 4 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   70.6%;  Pred. No. 9.4e+02;
  Matches   12;  Conservative    3;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1033 GACTTTGGCCTGGCCCG 1049
              |||:: ||| :||||||
Db          1 GACUUCGGCUUGGCCCG 17


RESULT 1370
```

```
AAV47637
ID   AAV47637 standard; DNA; 18 BP.
XX
AC   AAV47637;
XX
DT   25-MAR-2003  (revised)
DT   08-DEC-1998  (first entry)
XX
DE   Primer 1, located in exon 3 and 4 of VEGF-B.
XX
KW   Primer; amplification; PCR; mouse; VEGF-B; allele; F2 offspring;
KW   cysteine residue; intramolecular disulphide bond; transgenic animal; ss.
XX
OS   Synthetic.
OS   Mus sp.
XX
PN   WO9836052-A1.
XX
PD   20-AUG-1998.
XX
PF   18-FEB-1998;   98WO-US003212.
XX
PR   18-FEB-1997;   97US-0038202P.
XX
PA   (LUDW-) LUDWIG INST CANCER RES.
XX
PI   Von Euler G,  Aase K,  Betsholtz C,  Eriksson U,  Pekny M;
PI   Gebre-Medhin S,  Li X;
XX
DR   WPI; 1998-457107/39.
XX
PT   Transgenic non-human animals - which contain cells with modified vascular
PT   endothelial growth factor B gene for use in diagnostic and therapeutic
PT   studies.
XX
PS   Example 4; Page 22; 45pp; English.
XX
CC   Primers AAV47637 and AAV47638 were used to amplify the wildtype VEGF-B
CC   allele from tail DNA from F2 offspring, and can be located to exon 3 and
CC   exon 4 of the mouse VEGF-B gene. F2 mice that contain the wild-type
CC   allele were found to produce an amplified fragment of 316 bp upon PCR
CC   with these primers, however mutant alleles will not be amplified by these
CC   primers, due to most of exon 3 and all of exon 4 having been completely
CC   deleted. These mutant mice produce a non-functional protein because the
CC   deletion removes 7 out of the 8 cysteine residues, thus disrupting
CC   intramolecular disulphide bonds. The transgenic animals can be used in
CC   elucidating the effects of VEGF-B on physiological phenomena such as
CC   permeability, inflammation and/or tissue repair. (Updated on 25-MAR-2003
CC   to correct PI field.)
XX
SQ   Sequence 18 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         47 GACCAGCAGTGTGACTG 63
              | ||||| |||||||||
Db          1 GCCCAGCTGTGTGACTG 17


RESULT 1371
AAV53112
ID   AAV53112 standard; DNA; 18 BP.
XX
AC   AAV53112;
XX
DT   12-NOV-1998  (first entry)
XX
DE   MHC class II Ea promoter CPRE sequence (-3 to +14 basepairs).
XX
KW   CP2 recognition element; IL4; promoter; asthma; therapeutic composition;
KW   CP2 function affector; Th1/Th2 cell balance regulation; immune response;
KW   immunological disease; allergic rhinitis, allergic conjunctivitis; CPRE;
KW   dermatitis; urticaria; multiple sclerosis; arthritis; malignancy;
KW   type I diabetes mellitus; parasitic infection; immunodeficient disorder;
KW   T helper cell response; viral antigen; ss.
XX
OS   Homo sapiens.
XX
PN   WO9836641-A1.
XX
PD   27-AUG-1998.
XX
PF   19-FEB-1998;   98WO-US003049.
XX
PR   20-FEB-1997;   97US-0037972P.
XX
PA   (SCHE-) SCHEPENS EYE RES INST INC.
PA   (JOHN-) JOHNS HOPKINS SCHOOL MEDICINE.
PA   (SLOK ) SLOAN KETTERING INST CANCER RES.
XX
PI   Ono SJ,  Casolaro V,  Sheffery M,  Swendeman SL;
XX
DR   WPI; 1998-467194/40.
XX
PT   Use of affector(s) of CP2 function - for modulating immune responses for
PT   treating e.g. allergies, auto-immune disease, infections,
PT   immunodeficiency disorders or malignancies.
XX
PS   Claim 8; Fig 4D; 58pp; English.
XX
CC   Sequences shown in AAV53107 to AAV53114 represent oligonucleotides
CC   homologous to the CP2 recognition element (CPRE) region and can interfere
CC   with CP2/ CPRE interaction. These oligonucleotides are inhibitors of CP2
CC   function and can be used in a therapeutic composition of the invention. A
CC   method of screening for such a CP2 function affector comprises providing
CC   first and second samples of components for an assay for complex formation
CC   between CP2 and a CPRE in the human IL4 promoter and causing the first
CC   sample of components to react in the assay, where the extent of complex
CC   formation between CP2 and a CPRE in the human IL4 promoter in the first
CC   assay sample is determined. A candidate affector is added to the second
CC   sample of components which is then caused to react in the assay, and the
CC   extent of complex formation between CP2 and a CPRE in the human IL4
CC   promoter in the second assay sample is determined. The extent of complex
CC   formation between the two assay samples is compared to determine the
CC   effect of the candidate affector. The therapeutic composition comprising
CC   the affector is used for the interruption or enhancement of CP2 activity
CC   and thus regulation of Th1/Th2 cell balance, for therapeutic control of
CC   the immune response and immunological disease in a variety of conditions
CC   including allergic rhinitis, allergic conjunctivitis, asthma, dermatitis,
CC   urticaria, multiple sclerosis, type I diabetes mellitus, arthritis and
CC   parasitic infection. CP2 or dominant negative CP2 may also be useful in
CC   the management of immunodeficient disorders or malignancies by amplifying
CC   T helper cell responses to viral antigen
XX
SQ   Sequence 18 BP; 2 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1456 TTCTTCCTCAGTCTGGG 1472
              |||| |||||||||| |
Db          1 TTCTGCCTCAGTCTGCG 17


RESULT 1372
AAX17892/c
ID   AAX17892 standard; DNA; 18 BP.
XX
AC   AAX17892;
XX
DT   11-MAY-1999  (first entry)
XX
DE   Anti-CMV oligonucleotide #5479.
```

XX
KW Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
KW cytomegalovirus; inhibition; replication; sugar modification;
KW phosphorothioate; infection; retinitis; ss.
XX
OS Synthetic.
OS Human herpesvirus 5.
XX
PN WO9845314-A1.
XX
PD 15-OCT-1998.
XX
PF 07-APR-1998; 98WO-US006895.
XX
PR 09-APR-1997; 97US-00838715.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Draper KG, Kisner DL, Anderson KP, Chapman S;
XX
DR WPI; 1998-568330/48.
XX
PT New antisense oligonucleotides that target cytomegalovirus nucleic acid -
PT particularly including 2-methoxyethoxy sugar modifications, especially
PT for treating viral retinitis, with long-lasting retention in the retina.
XX
PS Claim 7; Page 30; 99pp; English.
XX
CC Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic
CC acid (AAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
CC polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
CC replication. Optionally the oligonucleotides include at least one 2'-(2-
CC methoxyethoxy) sugar modification or phosphorothioate internucleotide
CC linkages. The oligonucleotides are used to inhibit CMV infections (by in
CC vivo or in vitro contact with cells, tissues or body fluids), especially
CC to treat or prevent CMV infections, particularly retinitis
XX
SQ Sequence 18 BP; 0 A; 5 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        133 ATGAAGAAGATCAAACG 149
              | |||||||| ||||||
Db         18 AAGAAGAAGAGCAAACG 2
```

RESULT 1373
AAZ41129/c
ID AAZ41129 standard; DNA; 18 BP.
XX
AC AAZ41129;
XX
DT 26-JAN-2000 (first entry)
XX
DE Human G-alpha-11 phosphorothioate antisense oligonucleotide #33.
XX
KW Identification; genetic target; gene modulation; human; probe;
KW antisense oligonucleotide; phosphorothioate; PCR primer;
KW nucleotide sequence-based technology; antisense drug discovery;
KW target validation; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9953101-A1.
XX
PD 21-OCT-1999.
XX
PF 13-APR-1999; 99WO-US008268.
XX
PR 13-APR-1998; 98US-0081483P.
PR 28-APR-1998; 98US-00067638.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Cowsert LM, Baker BF, Mcneil J, Freier SM, Sasmor HM, Brooks DG;
PI Ohasi C, Wyatt JR, Borchers AH, Vickers TA;
XX
DR WPI; 1999-620446/53.
XX
PT Identifying compounds which modulate expression of nucleic acids, used to
PT provide compounds having defined physical, chemical or bioactive
PT properties, e.g. antisense activity.
XX
PS Example 27; Page 108; 264pp; English.
XX
CC A method has been developed of defining a set of compounds that modulate
CC the expression of a target nucleic acid (tNA) sequence via binding of the
CC compounds with the tNA sequence. The method comprises generating a
CC library of virtual compounds in silico according to defined criteria, and
CC evaluating in silico the binding of the virtual compounds with the tNA
CC according to defined criteria. Also described are: (1) a method of
CC defining a set of oligonucleotides (ONs) that modulate the expression of
CC a tNA sequence via binding of the ONs with the tNA sequence comprising
CC generating a library of virtual compounds in silico according to defined
CC criteria, and evaluating in silico the binding of the virtual ONs with
CC the tNA according to defined criteria; and (2) a method of defining a set
CC of compounds that modulate the expression of a tNA sequence via binding
CC of the compounds with the tNA. The methods can be used for the generation
CC and identification of synthetic compounds having defined physical,
CC chemical or bioactive properties. Information gathered from assays of
CC such compounds is used to identify nucleic acid sequences that are
CC tractable to a variety of nucleotide sequence-based technologies, e.g.
CC antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
CC AAY52701 to AAY52706, represent sequences used in the exemplification of
CC the present invention
XX
SQ Sequence 18 BP; 2 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        512 ACCTGGAGAAGCTGACC 528
              || |||||||| |||||
Db         17 ACGTGGAGAAGGTGACC 1
```

RESULT 1374
AAZ31599/c
ID AAZ31599 standard; DNA; 18 BP.
XX
AC AAZ31599;
XX
DT 13-JAN-2000 (first entry)
XX
DE Human IKB-Beta antisense inhibitor ISIS# 23583.
XX
KW Inhibitor-kappa B kinase-beta; IKB-beta; human; T-cell leukaemia; asthma;
KW inflammatory response; inflammatory disease; juvenile diabetes mellitus;
KW Graves' disease; rheumatoid arthritis; allograft rejection; diagnosis;
KW inflammatory bowel disease; multiple sclerosis; contact dermatitis;
KW rhinitis; allergy; hyperproliferative disorder; tumour; therapy;
KW antisense inhibitor; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US5977341-A.
XX
PD 02-NOV-1999.
XX
PF 20-NOV-1998; 98US-00197008.
XX

```
PR   20-NOV-1998;   98US-00197008.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Cowsert LM;
XX
DR   WPI; 1999-619715/53.
XX
PT   Antisense oligonucleotides inhibiting human Inhibitor-kappa B Kinase-
PT   beta, useful for treating conditions such as inflammation, asthma,
PT   diabetes, allograft rejection, allergies, hyperproliferative disorders or
PT   tumors.
XX
PS   Claim 11; Col 40; 32pp; English.
XX
CC   This sequence represents an antisense oligonucleotide (I) of the
CC   invention. (I) are 8 to 30 nucleotides in length and inhibit the
CC   expression of human Inhibitor-kappa B kinase-beta (IKB-beta). (I)
CC   inhibits the expression of human IKB-beta which plays a role in the
CC   development of T-cell leukaemia and in the activation of inflammatory
CC   responses. (I) is therefore useful for treating inflammatory diseases or
CC   disorders with an inflammatory component such as asthma, juvenile
CC   diabetes mellitus, Graves' disease, rheumatoid arthritis, allograft
CC   rejection, inflammatory bowel disease, multiple sclerosis, contact
CC   dermatitis, rhinitis and various allergies, or hyperproliferative
CC   disorders such as leukaemias and other tumours. (I) may also be used for
CC   detection of the above disorders
XX
SQ   Sequence 18 BP; 5 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        831 CACCCTTGTCTTTGAGT 847
              ||||||.|||||||||
Db         17 CACCCTGGCCTTTGAGT 1


RESULT 1375
AAX56422
ID   AAX56422 standard; DNA; 18 BP.
XX
AC   AAX56422;
XX
DT   22-JUL-1999  (first entry)
XX
DE   Human Herg-3 PCR primer SEQ ID NO:10.
XX
KW   Human; erg subfamily; potassium ion channel protein; Herg-2; Herg-3;
KW   cardiac arrhythmia; long Q-T syndrome; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9920760-A2.
XX
PD   29-APR-1999.
XX
PF   21-OCT-1998;   98WO-US022286.
XX
PR   22-OCT-1997;   97US-00956242.
XX
PA   (WISC ) WISCONSIN ALUMNI RES FOUND.
XX
PI   Ganetzky BS,  Titus SA;
XX
DR   WPI; 1999-326594/27.
XX
PT   Novel ion channel genes and proteins useful for identifying homologues
PT   and screening for therapeutics.
XX
PS   Example; Page 15; 46pp; English.
XX
CC   The present sequence represents a PCR primer for Herg-3, a human erg
CC   subfamily of potassium ion channel protein. The erg genes encode
CC   potassium ion channel proteins. These proteins are implicated in the
CC   development of long Q-T syndrome, a rare, but often fatal, cardiac
CC   arrhythmia. The Herg-2 and -3 proteins can be used to identify modulators
CC   of the proteins, useful in therapeutics. The nucleic acids can be used
CC   for screening of homologues
XX
SQ   Sequence 18 BP; 0 A; 6 C; 6 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        930 GCTGCTCCGTGGCCTGG 946
              |||||||||||.|||.|
Db          2 GCTGCTCCGTGTCCTTG 18


RESULT 1376
AAZ19500/c
ID   AAZ19500 standard; DNA; 18 BP.
XX
AC   AAZ19500;
XX
DT   15-NOV-1999  (first entry)
XX
DE   Human G-alpha-11 phosphorothioate antisense oligonucleotide SEQ ID NO:40.
XX
KW   Human; G-alpha-11; antisense oligonucleotide; inhibition; expression;
KW   phosphorothioate; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US5951455-A.
XX
PD   14-SEP-1999.
XX
PF   04-DEC-1998;   98US-00205922.
XX
PR   04-DEC-1998;   98US-00205922.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Cowsert LM;
XX
DR   WPI; 1999-539140/45.
XX
PT   Inhibitory antisense compounds useful for the treatment of diseases
PT   associated with G-alpha-11.
XX
PS   Claim 3; Col 40; 38pp; English.
XX
CC   The present invention describes inhibitory antisense compounds of 8-30
CC   nucleotides, targeted to a nucleic acid molecule encoding human G-alpha-
CC   11. AAZ19468 to AAZ19547 represent human G-alpha-11 phosphorothioate
CC   antisense oligonucleotides given in the present invention. The
CC   oligonucleotides may be useful for the treatment of diseases associated
CC   with G-alpha-11
XX
SQ   Sequence 18 BP; 2 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        512 ACCTGGAGAAGCTGACC 528
              || |||||||| |||||
Db         17 ACGTGGAGAAGGTGACC 1
```

```
RESULT 1377
AAA74957
ID   AAA74957 standard; DNA; 18 BP.
XX
AC   AAA74957;
XX
DT   02-JAN-2001  (first entry)
XX
DE   PCR primer used to amplify a 316 bp fragment of murine VEGF-B gene.
XX
KW   VEGF-B; vascular endothelial growth factor-B; heart abnormality;
KW   ischemia; atrioventricular conduction defect; myocardium; heart disease;
KW   PCR primer; ss.
XX
OS   Mus sp.
XX
PN   WO200052462-A1.
XX
PD   08-SEP-2000.
XX
PF   03-MAR-2000; 2000WO-US005465.
XX
PR   03-MAR-1999;   99US-0160083P.
XX
PA   (LUDW-) LUDWIG INST CANCER RES.
XX
PI   Aase K,  Thoren P,  Eriksson U;
XX
DR   WPI; 2000-638114/61.
XX
PT   Use of vascular endothelial growth factor B deficient animals for
PT   screening atrioventricular conduction or ischemia modulating compounds,
PT   and characterization of the biological roles of the growth factor.
XX
PS   Example 4; Page 31; 58pp; English.
XX
CC   PCR primers AAA74956-57 were used to amplify a 316 bp fragment from exons
CC   3 and 4 of the VEGF (vascular endothelial growth factor)-B. The primers
CC   were used to analyse VEGF-B defficient transgenic mice. VEGF-B deficient
CC   animals show heart abnormalities that appear to be caused by
CC   atrioventricular conduction defects and ischemia of the myocardium. The
CC   specification describes methods for screening a compound for
CC   atrioventricular conduction or ischemia modulating activity. The method
CC   comprises introducing the compound into a VEGF-B deficient non-human
CC   animal, and assaying the effect on atrioventricular conduction or
CC   ischemia. The methods are used for screening atrioventricular conduction
CC   or ischemia modulating compounds, treatment or alleviation of these
CC   conditions, diagnosis of heart disease characterized by loss of VEGF-B
CC   expression, and detecting or diagnosing VEGF-B deficiency in heart of a
CC   test subject
XX
SQ   Sequence 18 BP; 2 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         47 GACCAGCAGTGTGACTG 63
              | ||||| |||||||||
Db          1 GCCCAGCTGTGTGACTG 17


RESULT 1378
AAA09733/c
ID   AAA09733 standard; DNA; 18 BP.
XX
AC   AAA09733;
XX
DT   23-JUN-2000  (first entry)
XX
DE   G-alpha-i2 antisense inhibitor oligonucleotide #33 (ISIS #25844).
XX
KW   G-alpha-i2; antisense inhibitor; infection; inflammation; prevent;
KW   tumour formation; treatment; inhibit; ss.
XX
OS   Homo sapiens.
XX
PN   US6040179-A.
XX
PD   21-MAR-2000.
XX
PF   25-JUN-1999;   99US-00339993.
XX
PR   25-JUN-1999;   99US-00339993.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Cowsert LM;
XX
DR   WPI; 2000-270140/23.
XX
PT   Novel antisense oligonucleotide containing compounds, useful for
PT   inhibiting the expression of G-alpha-i2 in human cells and tissues and
PT   treating infection, inflammation and cancer.
XX
PS   Claim 1; Col 41; 31pp; English.
XX
CC   This sequence represents an antisense oligonucleotide sequence targeted
CC   to a nucleotide sequence encoding human G-alpha-i2. G-alpha-i2 is a
CC   member of the Gi subfamily of G proteins, which is involved in hormonal
CC   inhibition of adenylyl cyclase and in the regulation of plasma membrane
CC   enzymes. The expression of G-alpha-i2 has been shown to be altered in
CC   some tumours. Mice lacking the G-alpha-i2 gene display growth retardation
CC   and develop adenocarcinoma of the colon and a form of lethal diffuse
CC   colitis similar to ulcerative colitis in humans. The antisense molecules
CC   are useful for inhibiting the expression of G-alpha-i2 in human cells or
CC   tissues, and for treating and preventing various disorders such as
CC   infection, inflammation and tumour formation. The antisense
CC   oligonucleotides are also useful for research and diagnostic purposes
XX
SQ   Sequence 18 BP; 3 A; 9 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1636 AGGCAGCGGCTGGAGGG 1652
              |||| ||| ||||||||
Db         17 AGGCTGCGTCTGGAGGG 1


RESULT 1379
AAA86683
ID   AAA86683 standard; DNA; 18 BP.
XX
AC   AAA86683;
XX
DT   04-DEC-2000  (first entry)
XX
DE   Cdc 2 kinase hammerhead ribozyme recognitoin site #114.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US028772.
XX
PR   04-DEC-1998;   98US-0110954P.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
```

```
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1.
XX
PS   Example 1; Page 21; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells. The
CC   ribozyme is resistant to endonuclease activity and hence is efficient in
CC   restenosis treatment
XX
SQ   Sequence 18 BP; 2 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1036 TTTGGCCTGGCCCGAGC 1052
                ||||||||  ||| ||||
Db          1 TTTGGCCTTGCCAGAGC 17


RESULT 1380
AAZ57669/c
ID   AAZ57669 standard; DNA; 18 BP.
XX
AC   AAZ57669;
XX
DT   05-APR-2000  (first entry)
XX
DE   Human G-alpha-12 antisense inhibitor ISIS# 20657.
XX
KW   G-alpha-12 inhibitor; antisense compound; cell differentiation; cancer;
KW   cell growth; metastatic growth; ss; ISIS# 20657.
XX
OS   Homo sapiens.
XX
PN   US5998206-A.
XX
PD   07-DEC-1999.
XX
PF   23-FEB-1999;   99US-00256496.
XX
PR   23-FEB-1999;   99US-00256496.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Cowsert LM;
XX
DR   WPI; 2000-095920/08.
XX
PT   Antisense inhibition of human G-alpha-12 expression.
XX
PS   Example 15; Col 38; 36pp; English.
XX
CC   This is a human G-alpha-12 antisense nucleotide sequence. G-alpha-12 is a
CC   member of the G12/13 subfamily of G-proteins. The primary function of G-
CC   alpha-12 is in cell differentiation and growth. The invention relates to
CC   antisense compounds which are 8-30 nucleotides long (see AAZ57668-
CC   Z57746). The antisense molecules are targeted to the human G-alpha-12
CC   nucleic acid molecule, and inhibit the expression of G-alpha-12. The
CC   molecules preferably have a modified internucleotide linkage, and at
CC   least one modified sugar moiety. The compounds target different regions
CC   of the human G-alpha-12 RNA. The expression of human G-alpha 12 is
CC   inhibited by contacting human cells or tissues in vitro with the
CC   antisense molecules. The oligonucleotides are used in modulating the
CC   function of nucleic acid molecules encoding G-alpha-12, ultimately
CC   modulating the amount of G-alpha-12 produced. The antisense compounds can
CC   be utilized for diagnostics, therapeutics, prophylaxis and as research
CC   agents and kits. They may be useful in the treatment of cancer, and
CC   metastatic growth
XX
SQ   Sequence 18 BP; 2 A; 5 C; 9 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       552 GCCCCTCAGCCGCCGCC 568
                | ||||||||||| |||
Db        17 GACCCTCAGCCGCTGCC 1


RESULT 1381
AAZ56415
ID   AAZ56415 standard; DNA; 18 BP.
XX
AC   AAZ56415;
XX
DT   17-MAR-2000  (first entry)
XX
DE   Escherichia coli H7 specific fliC oligonucleotide primer #1696.
XX
KW   Flagellin; fliC; antigen; detection; PCR primer; ss.
XX
OS   Escherichia coli.
XX
PN   WO9961458-A1.
XX
PD   02-DEC-1999.
XX
PF   21-MAY-1999;   99WO-AU000385.
XX
PR   21-MAY-1998;   98AU-00003634.
XX
PA   (UNSY ) UNIV SYDNEY.
XX
PI   Reeves PR,  Wang L;
XX
DR   WPI; 2000-072598/06.
XX
PT   Novel nucleic acid molecule useful for the detection of flagellated
PT   bacterial strains in food, feces, etc.
XX
PS   Disclosure; Page 43; 245pp; English.
XX
CC   AAZ56331 to AAZ56398 represent nucleic acid molecules (I) encoding all or
CC   part of an Escherichia coli flagellin protein except a protein expressed
CC   by E. coli H1, H7, H12 or H48 type strains. The present invention also
CC   describes a method of detecting the presence of E. coli of a particular H
CC   serotype in a sample, comprising specifically hybridising a nucleic acid,
CC   preferably at least a pair, derived from a flagellating gene, specific
CC   for a particular flagellin gene associated with the H serotype, to any
CC   E.coli in the sample which contain the gene, and detecting any hybridised
CC   molecules, identifying the presence of that serotype in the sample. (I)
CC   are useful for: (1) detecting the presence of E. coli of H serotype in a
CC   sample by hybridising at least one or a pair of (I) to any E. coli in the
CC   sample and detecting the hybridised nucleic acid molecules; and (2) for
CC   detecting the presence of both O and H-serotypes of E. coli by
CC   hybridising at least one or a pair of (I) to any E. coli present in the
CC   sample and detecting the hybridised nucleic acid molecules. (I) is
CC   particularly useful for detecting the combination of O and H antigen.
CC   Hybridised (I) when using at least one (I) is detected by southern blot
CC   analysis and, when using a pair of (I), is detected by polymerase chain
CC   reaction (PCR). AAZ56399 to AAZ56420 represent primers used in the
CC   exemplification of the present invention
XX
SQ   Sequence 18 BP; 2 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
```

```
  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1566 GCCTGACTCAGGCAGGC 1582
              ||||||||||||| | |
Db          2 GCCTGACTCAGGCGGCC 18


RESULT 1382
AAC60641/c
ID   AAC60641 standard; DNA; 18 BP.
XX
AC   AAC60641;
XX
DT   01-FEB-2001  (first entry)
XX
DE   Human PDK-1 antisense oligonucleotide ISIS #29246.
XX
KW   Human; PDK-1; 3-phosphoinositide dependent protein kinase-1;
KW   antisense oligonucleotide; phosphorothioate; antiinflammatory;
KW   cytostatic; antimicrobial; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   US6124272-A.
XX
PD   26-SEP-2000.
XX
PF   09-APR-1999;   99US-00289466.
XX
PR   09-APR-1999;   99US-00289466.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Cowsert LM;
XX
DR   WPI; 2000-611015/58.
XX
PT   Novel antisense compounds useful for inhibiting the expression of human 3
PT   -phosphoinositide dependent protein kinase-1, useful e.g. for treating
PT   inflammation, tumors and infections.
XX
PS   Claim 3; Col 39; 41pp; English.
XX
CC   The present sequence is one of a large number of antisense
CC   oligonucleotides which are targeted to a nucleic acid molecule encoding
CC   human 3-phosphoinositide dependent protein kinase-1 (PDK-1). The
CC   antisense compounds may be oligodeoxynucleotides or chimeric
CC   oligonucleotides containing a central gap region, consisting of ten 2'-
CC   deoxynucleotides, which is flanked on both sides by 2'-methoxyethyl (2'-
CC   MOE) wings. The oligonucleotides have a phosphorothioate backbone. The
CC   antisense oligonucleotides are useful for inhibiting the expression of
CC   human PDK-1 in human cells or tissues. They are also useful for
CC   preventing or delaying infection, inflammation or tumours and are useful
CC   for research and diagnostics
XX
SQ   Sequence 18 BP; 3 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        812 TCCACACGGAGAAGTCC 828
              | | |||||||||||||||
Db         17 TGCTCACGGAGAAGTCC 1


RESULT 1383
AAF56289/c
ID   AAF56289 standard; DNA; 18 BP.
XX
AC   AAF56289;
XX
DT   18-APR-2001  (first entry)
XX
DE   Primer #4.
XX
KW   Parthenocarpy; plant; DefH9-iaaM; rolA; regulation; ss.
XX
OS   Synthetic.
XX
PN   WO200105985-A1.
XX
PD   25-JAN-2001.
XX
PF   13-JUL-2000; 2000WO-IT000290.
XX
PR   16-JUL-1999;   99IT-RM000451.
XX
PA   (GINE-) GINESTRA SCARL.
PA   (SPER-) IST SPERIMENTALE ORTICOLTURA.
PA   (CNDR ) CONSIGLIO NAZ DELLE RICERCHE.
XX
PI   Spena A,  Rotino G,  Ficcadenti N,  Defez R;
XX
DR   WPI; 2001-147350/15.
XX
PT   Use of DNA fragment of specified length to modulate the expression of
PT   genes that induce the parthenocarpic trait in plants, by inserting the
PT   DNA fragment at the 5' end transcribed untranslated region of the gene.
XX
PS   Disclosure; Page 11; 29pp; English.
XX
CC   The present invention relates to use of a DNA fragment comprising a
CC   sequence of 86 nucleotides fully defined in the specification, or its
CC   functional analogs, for regulating the expression of a gene that induces
CC   parthenocarpy in a plant, by inserting the fragment at the 5' end
CC   transcribed untranslated region of the gene. The invention is useful for
CC   transgenic plant production which do not show any malformations caused by
CC   the use of gene DefH9-iaaM in some species and cultivars, and for
CC   regulating the gene that induces parthenocarpy in a plant
XX
SQ   Sequence 18 BP; 3 A; 10 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1592 GCGTGGTGGACACCGAG 1608
              | ||||||||||| |||
Db         17 GTGTGGTGGACACGGAG 1


RESULT 1384
AAF56287/c
ID   AAF56287 standard; DNA; 18 BP.
XX
AC   AAF56287;
XX
DT   18-APR-2001  (first entry)
XX
DE   Primer #2.
XX
KW   Parthenocarpy; plant; DefH9-iaaM; rolA; regulation; ss.
XX
OS   Synthetic.
XX
PN   WO200105985-A1.
XX
PD   25-JAN-2001.
XX
PF   13-JUL-2000; 2000WO-IT000290.
XX
PR   16-JUL-1999;   99IT-RM000451.
```

XX
PA (GINE-) GINESTRA SCARL.
PA (SPER-) IST SPERIMENTALE ORTICOLTURA.
PA (CNDR) CONSIGLIO NAZ DELLE RICERCHE.
XX
PI Spena A, Rotino G, Ficcadenti N, Defez R;
XX
DR WPI; 2001-147350/15.
XX
PT Use of DNA fragment of specified length to modulate the expression of
PT genes that induce the parthenocarpic trait in plants, by inserting the
PT DNA fragment at the 5' end transcribed untranslated region of the gene.
XX
PS Disclosure; Page 11; 29pp; English.
XX
CC The present invention relates to use of a DNA fragment comprising a
CC sequence of 86 nucleotides fully defined in the specification, or its
CC functional analogs, for regulating the expression of a gene that induces
CC parthenocarpy in a plant, by inserting the fragment at the 5' end
CC transcribed untranslated region of the gene. The invention is useful for
CC transgenic plant production which do not show any malformations caused by
CC the use of gene DefH9-iaaM in some species and cultivars, and for
CC regulating the gene that induces parthenocarpy in a plant
XX
SQ Sequence 18 BP; 3 A; 10 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1592 GCGTGGTGGACACCGAG 1608
| |||||||||||| |||
Db 17 GTGTGGTGGACACGGAG 1

RESULT 1385
AAS09667
ID AAS09667 standard; DNA; 18 BP.
XX
AC AAS09667;
XX
DT 24-OCT-2001 (first entry)
XX
DE Oat Beta-amyrin synthase PCR primer ASEQ2.
XX
KW Oat; PCR primer; Beta-amyrin synthase; triterpenoid; palatability;
KW oxidosqualene cyclase; pathogen resistance; transgenic plant;
KW fungal disease; ss.
XX
OS Avena strigosa.
XX
PN WO200146391-A2.
XX
PD 28-JUN-2001.
XX
PF 20-DEC-2000; 2000WO-GB004908.
XX
PR 22-DEC-1999; 99GB-00030394.
PR 16-AUG-2000; 2000GB-00020217.
XX
PA (PLAN-) PLANT BIOSCIENCE LTD.
XX
PI Osbourn AE, Haralampidis K, Bryan GT;
XX
DR WPI; 2001-418055/44.
XX
PT Novel beta-amyrin synthase encoding nucleic acids useful for influencing
PT or affecting triterpene synthesis, and hence resistance to fungal
PT pathogen, taste, palatability or nutritional value of plants.
XX
PS Claim 11; Page 63; 69pp; English.
XX
CC The sequence represents a PCR primer used to isolate nucleic acids
CC encoding Oat Beta-amyrin synthase (an oxidosqualene cyclase). Beta-amyrin
CC is a triterpenoid responsible for paltablity to animals and resistance to
CC pathogens and predators. The beta-amyrin synthase encoding nucleic acid
CC is useful for producing a transgenic plant, by introducing a vector
CC containing it into a host cell, optionally causing or allowing
CC recombination between the vector and the host cell genome so as to
CC transform the host cell, and regenerating a plant from the transformed
CC plant cell. The DNA is also useful for identifying, cloning or
CC determining the presence of a nucleic acid in a sample and for
CC influencing or affecting the quantity or quality of triterpenoid
CC synthesis, preferably an oleanane-type triterpene saponin synthesis, in a
CC plant, such as altering resistance to a fungal pathogen e.g., an
CC ascomycete having a sterol-containing membrane, optionally selected from
CC Gaeumannomyces graminis vars tritici and avenae, Fusarium culmorus, F.
CC avanaceum, Stagonospora nodorum or S. avenae, taste, palatability and/or
CC nutritional value, of the plant, by causing or allowing expression of the
CC DNA within the cells of the plant, following an earlier step of
CC introducing the DNA into a cell or its ancestor. The DNA is also useful
CC for reducing the level of triterpenoids in the plant, by causing or
CC allowing transcription from an antisense molecule in the plant, allowing
CC transcription from the DNA, or its part such as to reduce beta-amyrin
CC synthase expression by co-suppression, use of a nucleic acid encoding a
CC ribozyme specific for the DNA
XX
SQ Sequence 18 BP; 4 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1079 CCAATGAGGTGGTGACA 1095
|| |||||||||| |||
Db 2 CCCATGAGGTGGTCACA 18

RESULT 1386
AAS95078
ID AAS95078 standard; DNA; 18 BP.
XX
AC AAS95078;
XX
DT 13-FEB-2002 (first entry)
XX
DE Human otoferlin exon PCR primer #43.
XX
KW Human; mouse; otoferlin; OTOF; brain; auditory function; PCR primer;
KW autosomal nonsyndromic prelingual deafness; DFNB9; ss.
XX
OS Homo sapiens.
XX
PN WO200170972-A2.
XX
PD 27-SEP-2001.
XX
PF 23-MAR-2001; 2001WO-IB000578.
XX
PR 24-MAR-2000; 2000US-0191738P.
XX
PA (INSP) INST PASTEUR.
PA (CNRS) CNRS CENT NAT RECH SCI.
XX
PI Yasunaga S, Grati M, Cohen-Salmon M, El Amraoui A, Petit C;
PI Weil D;
XX
DR WPI; 2001-611499/70.
XX
PT Novel human gene Otoferlin, underlying an autosomal recessive
PT nonsyndromic prelingual deafness, DFNB9, and proteins encoded by the
PT gene, implicated in deafness.
XX
PS Claim 25; Page 17; 99pp; English.
XX
CC The invention relates to a purified polynucleotide (I) encoding a protein

```
CC   sequence (II) encoded by a novel human gene, otoferlin (OTOF) or the long
CC   human otoferlin isoform in brain. (I) was identified as underlying an
CC   autosomal nonsyndromic prelingual deafness DFNB9, and is thus useful for
CC   detecting deafness disease in humans and for characterising the functions
CC   of proteins and genes encoding them in auditory function. AAS95022-
CC   AAS95248 represent human and mouse otoferlin coding sequences, PCR
CC   primers and related sequences of the invention
XX
SQ   Sequence 18 BP; 4 A; 8 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        479 CACTACCAGCTGACATC 495
              ||| |||||||| ||||
Db          2 CACGACCAGCTGTCATC 18


RESULT 1387
AAF79533
ID   AAF79533 standard; DNA; 18 BP.
XX
AC   AAF79533;
XX
DT   29-MAY-2001  (first entry)
XX
DE   Caspase-6 protease cleavage signal nucleotide sequence.
XX
KW   Caspase-6; protease; cleavage signal; transgene expression;
KW   transgene localisation; sodium iodide symporter; NIS; ds.
XX
OS   Unidentified.
XX
PN   WO200113106-A1.
XX
PD   22-FEB-2001.
XX
PF   17-AUG-2000; 2000WO-US022566.
XX
PR   17-AUG-1999;   99US-0149168P.
PR   16-AUG-2000; 2000US-00639667.
PR   16-AUG-2000; 2000US-00640198.
XX
PA   (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
XX
PI   Russell SJ,  Morris J,  Peng K;
XX
DR   WPI; 2001-257548/26.
DR   P-PSDB; AAB73917.
XX
PT   Monitoring transgene expression and therapeutic peptide production in
PT   mammals by detecting marker polypeptides linked to transgenes or
PT   therapeutic genes released from cells into extracellular body fluid.
XX
PS   Example 11; Page 48; 79pp; English.
XX
CC   The present sequence is a self-cleaving linker. It may be used in a
CC   method for monitoring expression and/or localisation of a transgene, and
CC   production of therapeutic peptide in a mammal. The method involves
CC   quantifying or detecting the amount of marker polypeptide and/or sodium
CC   iodide symporter (NIS) linked to the product of the transgene or
CC   therapeutic gene released from cells into extracellular body fluid, or
CC   determining the location of labelled molecules which are transported into
CC   the cells bearing the marker peptide. The method provides convenient and
CC   effective monitoring of the level and kinetics of expression of
CC   transgenes and the tissue-specific distribution of expressed transgenes
CC   in cells, tissues, animals or humans without the need for disruptive and
CC   expensive sampling methods including surgery. The transgene location can
CC   be monitored without adversely affecting the mammal or the cell. The NIS
CC   is a self protein and as such does not stimulate a host immune reaction.
CC   Furthermore, the NIS functions solely to sequester iodine into a cell,
CC   which does not adversely affect normal cellular function or overall cell
CC   biology
XX
SQ   Sequence 18 BP; 3 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1723 CATGTTCACCTGCCCAC 1739
              ||||||| ||||| ||
Db          1 CATGTTCATCTGCCTAC 17


RESULT 1388
AAH61849
ID   AAH61849 standard; DNA; 18 BP.
XX
AC   AAH61849;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4273.
XX
KW   Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW   recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW   proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW   cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW   matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW   antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW   antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW   atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW   basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW   sickle cell retinopathy; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200130362-A2.
XX
PD   03-MAY-2001.
XX
PF   26-OCT-2000; 2000WO-US029500.
XX
PR   26-OCT-1999;   99US-0161532P.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Robbins JM,  Tritz R;
XX
DR   WPI; 2001-300427/31.
XX
PT   Treating proliferative skin or eye diseases and scarring, using ribozymes
PT   that cleave RNA encoding cytokines involved in inflammation, matrix
PT   metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS   Disclosure; Page 385; 408pp; English.
XX
CC   The present invention describes a method for treating a proliferative
CC   skin or eye disease and scarring. The method involves administering a
CC   ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC   inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC   dependent kinase, growth factor or a reductase, or administering a
CC   nucleic acid molecule (II) comprising a promoter operably linked to a
CC   nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC   dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC   ophthalmological, vulnerary, keratolytic and virucide activities, and
CC   cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC   in gene therapy. (I) and (II) are useful for treating proliferative skin
CC   diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC   squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC   also be used for treating proliferative eye diseases such as diabetic
CC   retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC   prematurity and retinal detachment, and for treating and preventing
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CC   scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC   scar. AAH57577 to AAH62099 represent sequences used in the
CC   exemplification of the present invention
XX
SQ   Sequence 18 BP; 2 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1036 TTTGGCCTGGCCCGAGC 1052
              ||||||||  |||  ||||
Db          1 TTTGGCCTTGCCAGAGC 17


RESULT 1389
ABA03355
ID   ABA03355 standard; DNA; 18 BP.
XX
AC   ABA03355;
XX
DT   12-FEB-2002  (first entry)
XX
DE   Human clone WA15_li coding sequence probe.
XX
KW   Human; clone WA15_li; nutrition; cytokine; cell proliferation; probe;
KW   immunomodulatory; cell differentiation; haematopoiesis; tissue growth;
KW   chemotactic; chemokinetic; thrombolytic; antiinflammatory; cancer;
KW   cytostatic; virucide; antibacterial; fungicide; haematological;
KW   vulnerary; contraceptive; antiinfertility; haemostatic;
KW   tumour inhibition; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175074-A1.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US010246.
XX
PR   31-MAR-2000; 2000US-0193769P.
XX
PA   (GEMY ) GENETICS INST INC.
XX
PI   Jacobs K,  Mccoy JM,  Lavallie ER,  Collins-Racie LA,  Evans C;
PI   Merberg D,  Treacy M;
XX
DR   WPI; 2001-639364/73.
XX
PT   New human protein related to the ribonuclease HI large subunit, useful
PT   for treating, e.g. cancer or inflammation.
XX
PS   Disclosure; Page 65; 67pp; English.
XX
CC   The present invention provides the protein and coding sequences of human
CC   WA15_li. These sequences can be used in nutritional supplements, they may
CC   have cytokine, cell differentiation, cell proliferation,
CC   immunomodulatory, antiinflammatory, haematopoiesis regulating, tissue
CC   growth, chemotactic, chemokinetic, haemostatic, thrombolytic, tumour
CC   suppression, and tumour inhibition activities, and they may also be used
CC   in the treatment of infections, infertility, and cognitive and depressive
CC   disorders. The present sequence is a probe used to isolate the coding
CC   sequence of the invention
XX
SQ   Sequence 18 BP; 6 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        627 GGACAAACTGGGCGAGG 643
              |||||||||||| || |
Db          2 GGACAAACTGGGGGAAG 18


RESULT 1390
AAI68749
ID   AAI68749 standard; DNA; 18 BP.
XX
AC   AAI68749;
XX
DT   21-JAN-2002  (first entry)
XX
DE   Human cystatin C derived primer 2.
XX
KW   Primer; cystatin C; post-operative insertion; bone tumor; vulnerary;
KW   transforming growth factor superfamily; osteopathic; gene therapy;
KW   bone regeneration; cancer; ss.
XX
OS   Homo sapiens.
XX
PN   DE10020125-A1.
XX
PD   25-OCT-2001.
XX
PF   18-APR-2000; 2000DE-01020125.
XX
PR   18-APR-2000; 2000DE-01020125.
XX
PA   (UYJE ) UNIV SCHILLER JENA.
XX
PI   Wiederanders B,  Maubach G;
XX
DR   WPI; 2002-018650/03.
XX
PT   Agent for stimulating bone regrowth, useful as insert after surgery for
PT   bone cancer, comprises single sequence expressing a fusion of growth
PT   factor and protease inhibitor.
XX
PS   Claim 8; Fig 3; 8pp; German.
XX
CC   This invention describes a novel agent (A) for post-operative insertion,
CC   after removal of bone tumor, comprising a nucleic acid (NA1) encoding a
CC   growth factor, especially of the transforming growth factor superfamily,
CC   linked by an oligonucleotide (ON) to a sequence (NA2) encoding a protease
CC   inhibitor (PI). The product of the invention has osteopathic and
CC   vulnerary activity and can be used for gene therapy. (A) are used to
CC   promote regeneration of bone after surgical removal of primary or
CC   metastatic bone cancers. (A) make it possible to use less extensive
CC   surgery (removal of less bone), since it reduces the risk of new
CC   metastases arising from the borders of the resected zone. It also
CC   improves growth of bone into prostheses, resulting in shorter recovery
CC   times and stronger incorporation of the prosthesis, and reduces the need
CC   for further surgery. This sequence represents a PCR primer used in the
CC   amplification of the cystatin C gene used to illustrate the method of the
CC   invention
XX
SQ   Sequence 18 BP; 1 A; 3 C; 11 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        229 AGTGGTGGTGGTGGCGG 245
              || |||||  ||||||||
Db          1 AGCGGTGGCGGTGGCGG 17


RESULT 1391
ABK14145
ID   ABK14145 standard; DNA; 18 BP.
XX
AC   ABK14145;
XX
DT   08-MAY-2002  (first entry)
XX
```

DE Chlorinated ethylene-decomposing bacteria detection DNA KWI-De3.
XX
KW Chlorinated ethylene-decomposing bacteria; 16S rRNA; 16S rDNA; ss; probe;
KW PCR; primer; soil; underground water; chlorinated ethylene; KWI-De3;
KW chlorinated ethane; Dehalococcoides.
XX
OS Synthetic.
XX
PN EP1176216-A2.
XX
PD 30-JAN-2002.
XX
PF 23-JUL-2001; 2001EP-00117844.
XX
PR 24-JUL-2000; 2000JP-00227580.
PR 09-MAR-2001; 2001JP-00066001.
XX
PA (KURK) KURITA WATER IND LTD.
XX
PI Nakamura K, Ueno T;
XX
DR WPI; 2002-173127/23.
XX
PT New nucleic acid for detecting chlorinated ethylene-decomposing bacteria
PT used to purify soil or underground water contaminated with chlorinated
PT ethylene or ethane.
XX
PS Claim 1; Page 7; 22pp; English.
XX
CC The invention relates to a nucleic acid which hybridises to the 16S
CC ribosomal (deoxy)ribonucleic acid of chlorinated ethylene-decomposing
CC bacteria. The nucleic acid can be used as a labelled probe for detecting
CC chlorinated ethylene-decomposing bacteria (e.g. Dehalococcoides)
CC comprising the novel nucleic acid by DNA hybridisation using the labelled
CC probe as an indicator. The bacteria can also be detected by performing
CC PCR using the nucleic acid as a primer and the sample nucleic acid as a
CC template, and detecting newly synthesised DNA. A method for decomposing
CC chlorinated ethylene or ethane comprises detecting chlorinated ethylene-
CC decomposing bacteria using underground water or soil as a sample, and
CC introducing the water/soil containing the bacteria, to soil or
CC underground water contaminated by chlorinated ethylene or ethane. The
CC methods are therefore useful for purifying soil or underground water
CC contaminated with chlorinated ethylene or ethane. This sequence
CC represents a nucleic acid which hybridises to nucleic acid of chlorinated
CC ethylene-decomposing bacteria
XX
SQ Sequence 18 BP; 5 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 596 GCTTTGGGAAACTGGAG 612
|||| ||||||||| ||
Db 1 GCTTCGGGAAACTGAAG 17

RESULT 1392
ABS64463
ID ABS64463 standard; DNA; 18 BP.
XX
AC ABS64463;
XX
DT 15-NOV-2002 (first entry)
XX
DE Human TGF-beta binding PCR primer SR1 #2.
XX
KW Human; NOVX; neurodegenerative disease; Alzheimer's disease; anxiety;
KW Parkinson's disease; Huntington's disease; neurological disorder;
KW schizophrenia; manic depression; mental retardation; angina pectoris;
KW cardiovascular disease; acute heart failure; myocardial infarction;
KW muscular disease; muscular disorder; retinal disease; photoreception;
KW deafness; keratinisation disorder; cancer; ovarian cancer; melanoma;
KW immunological disorder; inflammatory disease; immune disease; diabetes;
KW bacterial infection; fungal infection; protozoal infection; obesity;
KW viral infection; reproductive system disorder; metabolic disturbance;
KW anorexia; wasting disorder; chronic disease; infectious disease;
KW dyslipidaemia; TGF-beta binding; cloning; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200264791-A2.
XX
PD 22-AUG-2002.
XX
PF 10-DEC-2001; 2001WO-US048369.
XX
PR 08-DEC-2000; 2000US-0254329P.
PR 14-DEC-2000; 2000US-0255648P.
PR 15-MAY-2001; 2001US-0291037P.
PR 08-JUN-2001; 2001US-0297173P.
PR 08-JUN-2001; 2001US-0309258P.
PR 29-AUG-2001; 2001US-0315639P.
PR 01-OCT-2001; 2001US-0326393P.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Alsobrook JP, Anderson DW, Burgess CE, Boldog FL, Casman SJ;
PI Colman SD, Edinger SR, Ellerman K, Gerlach V, Gorman L, Grosse WM;
PI Guo X, Herrmann JL, Kekuda R, Lepley DM, Li L, Macdougall JR;
PI Millet I, Pena CEA, Peyman JA, Rastelli L, Rieger DK, Shimkets RA;
PI Smithson G, Spytek KA, Stone DJ, Tchernev VT, Vernet CAM, Voss EZ;
PI Zerhusen BD, Zhong H, Zhong M;
XX
DR WPI; 2002-643486/69.
XX
PT New NOVX polypeptides and polynucleotides useful for treating or
PT preventing e.g. neurodegenerative diseases, neurological disorders,
PT cardiovascular diseases, muscular diseases and disorders, or
PT immunological diseases.
XX
PS Example 3; Page 288; 299pp; English.
XX
CC The present invention relates to new NOVX polypeptides. The polypeptides,
CC polynucleotides and antibodies are useful in the manufacture of a
CC medicament for treating or preventing neurodegenerative diseases (e.g.
CC Alzheimer's disease, Parkinson's disease, or Huntington's disease),
CC neurological disorders (e.g. anxiety, schizophrenia, manic depression or
CC mental retardation), cardiovascular disease (e.g. acute heart failure,
CC angina pectoris or myocardial infarction), muscular diseases and
CC disorders, retinal diseases (including those involving photoreception,
CC deafness and keratinisation disorders), cancer (e.g. ovarian cancer or
CC melanoma), immunological disorders, inflammatory and immune diseases,
CC bacterial, fungal, protozoal and viral infections, and reproductive
CC system disorders. The proteins of the invention may be used to screen
CC drugs or compounds that modulate the NOVX protein activity or expression,
CC as well as to treat disorders characterised by insufficient or excessive
CC production of NOVX protein or protein forms that have decreased or
CC aberrant activity compared to NOVX wild type protein, such as diabetes,
CC obesity, metabolic disturbances associated with obesity, anorexia and
CC wasting disorders associated with chronic diseases and various cancers,
CC infectious diseases and various dyslipidaemias. The nucleic acid
CC sequences of the invention may be used in chromosome mapping, identifying
CC an individual from minute biological samples (tissue typing), and in
CC forensic identification of a biological sample. The present nucleic acid
CC sequence represents a cloning PCR primer that was used in the methods of
CC the invention for amplification of the NOVX TGF-beta binding gene
XX
SQ Sequence 18 BP; 1 A; 10 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 555 CCTCAGCCGCCGCCTCC 571
||||||| ||||||||

```
Db          1 CCTCAGCGTCCGCCTCC 17


RESULT 1393
ACD66643/c
ID   ACD66643 standard; DNA; 18 BP.
XX
AC   ACD66643;
XX
DT   16-SEP-2003  (first entry)
XX
DE   Human Inhibitor-kappa B kinase-beta antisense oligonucleotide #12.
XX
KW   Human; inhibitor-kappa B kinase-beta; anorectic; antidiabetic;
KW   antiinflammatory; cytostatic; gene therapy; antisense compound; obesity;
KW   diabetes type II; inflammatory disorder; cancer; leukaemia;
KW   antisense oligonucleotide; ss.
XX
OS   Homo sapiens.
XX
PN   US2003050270-A1.
XX
PD   13-MAR-2003.
XX
PF   24-MAY-2002; 2002US-00156610.
XX
PR   20-NOV-1998;   98US-00197008.
PR   28-JUL-1999;   99WO-US016959.
PR   30-AUG-2001; 2001US-00856246.
XX
PA   (MONI/) MONIA B P.
PA   (COWS/) COWSERT L M.
PA   (KOLL/) KOLLER E.
XX
PI   Monia BP,  Cowsert LM,  Koller E;
XX
DR   WPI; 2003-512357/48.
XX
PT   New antisense compound, useful for preparing a composition for treating
PT   obesity, diabetes type II, inflammatory disorder or cancer e.g.,
PT   leukemia.
XX
PS   Claim 3; Page 22; 49pp; English.
XX
CC   The invention describes a new antisense compound, which is 8-30
CC   nucleobases in length targeted to a nucleic acid molecule encoding
CC   Inhibitor-kappa B Kinase-beta that specifically hybridises with and
CC   inhibits the expression of Inhibitor-kappa B Kinase-beta. The compound is
CC   useful for preparing a composition for treating obesity, diabetes type
CC   II, inflammatory disorder or cancer e.g., leukaemia. This sequence
CC   represents an antisense oligonucleotide used to inihibit the expression
CC   of inhibitor-kappa B kinase-beta
XX
SQ   Sequence 18 BP; 5 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        831 CACCCTTGTCTTTGAGT 847
              ||||||  | ||||||||
Db         17 CACCCTGGCCTTTGAGT 1


RESULT 1394
ADE14990
ID   ADE14990 standard; DNA; 18 BP.
XX
AC   ADE14990;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Beer spoilage-associated primer SEQ ID 185.
XX
KW   ss; primer; detection; beer-spoilage; lactic acid bacteria;
KW   Gram-negative bacteria; spoilage bacteria.
XX
OS   Lactobacillus buchneri.
XX
PN   WO2002103043-A2.
XX
PD   27-DEC-2002.
XX
PF   19-JUN-2002; 2002WO-EP006808.
XX
PR   19-JUN-2001; 2001DE-01029410.
XX
PA   (VERM-) VERMICON AG.
XX
PI   Beimfohr C,  Snaidr J;
XX
DR   WPI; 2003-175243/17.
XX
PT   New oligonucleotides, useful for rapid detection of beer-spoilage
PT   bacteria by in situ hybridization, are specific for type, genus or
PT   species.
XX
PS   Claim 1; SEQ ID NO 185; 88pp; German.
XX
CC   This invention describes novel oligonucleotides used in a method for
CC   detecting beer-spoilage bacteria in a sample. The bacteria detected
CC   include lactic acid bacteria of the genera Lactobacillus or Pediococcus,
CC   especially the species L. coryniformis, L. perolens, L. buchneri, L.
CC   plantarum, L. fructivorans, L. lindneri, L. casei, L. brevis or P.
CC   damnosus or Gram-negative bacteria of the genera Pectinatus and
CC   Megasphaera, specifically P. frisingensis, P. cerevisiiphilus and M.
CC   cerevisiae. The oligonucleotides of the invention provide rapid detection
CC   of spoilage bacteria (typically within 48 hours, compared with 7-12 days
CC   for conventional culture methods), can detect all relevant bacteria in
CC   parallel, can differentiate between species of the same genus, and are
CC   easy to use. ADE14806-ADE15247 represent the oligonucleotides used in the
CC   method of the invention.
XX
SQ   Sequence 18 BP; 1 A; 4 C; 11 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        229 AGTGGTGGTGGTGGCGG 245
              || ||||| ||||||||
Db          2 AGCGGTGGCGGTGGCGG 18


RESULT 1395
ADE13509/c
ID   ADE13509 standard; DNA; 18 BP.
XX
AC   ADE13509;
XX
DT   29-JAN-2004  (first entry)
XX
DE   HLA class I allele specific primer #125.
XX
KW   ss; primer; PCR; human; Human Leukocyte Antigen; HLA; genotype.
XX
OS   Homo sapiens.
XX
PN   US2003165884-A1.
XX
PD   04-SEP-2003.
XX
PF   25-APR-2002; 2002US-00133779.
XX
PR   20-DEC-1999;   99US-0172768P.
PR   20-DEC-2000; 2000US-00747391.
```

XX
PA (STEM-) STEMCYTE INC.
XX
PI Chow R, Tonai R;
XX
DR WPI; 2003-874916/81.
XX
PT Identifying class I or II Human Leukocyte Antigen genotypes using
PT hybridization and amplification assays.
XX
PS Claim 7; SEQ ID NO 127; 66pp; English.
XX
CC The invention relates to a method of identifying a class I or II Human
CC Leukocyte Antigen (HLA) genotype of a subject using hybridisation and
CC amplification assay. The method is used for determining the HLA genotype
CC of a subject. The present sequence represents a HLA class I allele
CC specific primer.
XX
SQ Sequence 18 BP; 3 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 503 CTGAGGGCTACCTGGAG 519
|||| | ||||||||||
Db 18 CTGAAGCCTACCTGGAG 2

RESULT 1396
ADF13492
ID ADF13492 standard; DNA; 18 BP.
XX
AC ADF13492;
XX
DT 12-FEB-2004 (first entry)
XX
DE Apolipoprotein E (epsilon-4 allele), BaySNP 10948, PCR primer #2.
XX
KW Cardiant; antiarteriosclerotic; vasotropic; cerebroprotective;
KW hypotensive; gene therapy; human; apolipoprotein E; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO2003072813-A2.
XX
PD 04-SEP-2003.
XX
PF 14-FEB-2003; 2003WO-EP001514.
XX
PR 27-FEB-2002; 2002EP-00004258.
XX
PA (FARB) BAYER AG.
XX
PI Stropp U, Schwers S, Kallabis H;
XX
DR WPI; 2003-712738/67.
XX
PT New isolated polynucleotide encoded by a phenotype-associated gene,
PT useful for prognosticating statin therapy response, and diagnosing or
PT treating cardiovascular diseases, such as hypertension, myocardial
PT infarction and stroke.
XX
PS Example 1; Page 70; 182pp; English.
XX
CC The present invention relates to human phenotype-associated (PA) genes (I
CC ; ADF13307-ADF13386) which contain a Single Nucleotide Polymorphism
CC (SNP). The SNP is given in the sequence as a variant nucleotide. Also
CC claimed are methods for screening for agents which regulate the activity
CC of a PA gene and reagents that modulate the activity of a PA polypeptide
CC or a polynucleotide where the reagent is identified by the screening
CC methods. The methods and compositions of the present invention are useful
CC for prognosticating, diagnosing and treating cardiovascular diseases,
CC such as atherosclerosis, hypertension, restenosis, arterial inflammation,
CC myocardial infarction and stroke. The present sequence is a PCR primer,
CC used in the examples from the invention.
XX
SQ Sequence 18 BP; 6 A; 1 C; 10 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 31 CAGAGGTAGGCAGGAGG 47
|||||| ||| ||||||
Db 1 CAGAGGGAGGAAGGAGG 17

RESULT 1397
ADM92704
ID ADM92704 standard; DNA; 18 BP.
XX
AC ADM92704;
XX
DT 03-JUN-2004 (first entry)
XX
DE SNP-containing cardiovascular associated gene primer #34.
XX
KW SNP; single nucleotide polymorphism; cardiovascular associated gene;
KW allelic variation; atherosclerosis; ischemia; reperfusion; hypertension;
KW restenosis; arterial inflammation; myocardial infarction; stroke; primer;
KW ss.
XX
OS Homo sapiens.
XX
PN WO2003057911-A2.
XX
PD 17-JUL-2003.
XX
PF 07-JAN-2003; 2003WO-EP000060.
XX
PR 08-JAN-2002; 2002EP-00000153.
XX
PA (FARB) BAYER AG.
XX
PI Stropp U, Schwers S, Kallabis H;
XX
DR WPI; 2003-577532/54.
XX
PT New isolated polynucleotides comprising single nucleotide polymorphisms
PT of the cardiovascular gene, useful for assessing predisposition or
PT susceptibility to a cardiovascular disease, e.g. atherosclerosis,
PT restenosis or stroke.
XX
PS Disclosure; Page 67; 187pp; English.
XX
CC The invention relates an isolated polynucleotide (I) encoded by a
CC cardiovascular associated (CA) gene, having allelic variation contained
CC in a functional surrounding like full length cDNA for CA gene
CC polypeptide, and with or without the CA gene promoter sequence. (I) is a
CC polynucleotide comprising single nucleotide polymorphisms predicting
CC cardiovascular disease. The polynucleotides are useful for assessing
CC predisposition or susceptibility to a cardiovascular disease, e.g.
CC atherosclerosis, ischemia/reperfusion, hypertension, restenosis, arterial
CC inflammation, myocardial infarction, and stroke. These may also be used
CC to predict personal medication schemes omitting adverse drug reactions,
CC or as probes for detecting genetic polymorphisms and as templates for the
CC recombinant production of normal or variant peptides/polypeptides encoded
CC by the genes. This sequence corresponds to a PCR primer to amplify one of
CC the genes of the invention.
XX
SQ Sequence 18 BP; 6 A; 1 C; 10 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy          31 CAGAGGTAGGCAGGAGG 47
               ||||||  |||  ||||||
Db           1 CAGAGGGAGGAAGGAGG 17


RESULT 1398
ADL09359/c
ID   ADL09359 standard; DNA; 18 BP.
XX
AC   ADL09359;
XX
DT   06-MAY-2004  (first entry)
XX
DE   HLA locus-specific capture oligonucleotide #125.
XX
KW   ss; primer; human leukocyte antigen; HLA; HLA genotyping; human; PCR.
XX
OS   Homo sapiens.
XX
PN   US6670124-B1.
XX
PD   30-DEC-2003.
XX
PF   20-DEC-2000; 2000US-00747391.
XX
PR   20-DEC-1999;   99US-0172768P.
XX
PA   (STEM-) STEMCYTE INC.
XX
PI   Chow R,  Tonai R;
XX
DR   WPI; 2004-068584/07.
XX
PT   Identifying an HLA genotype of a subject by hybridizing the amplification
PT   products with an HLA locus-specific capture oligonucleotide and detecting
PT   the detectable complexes to identify the HLA genotype of the subject.
XX
PS   Example 1; SEQ ID NO 127; 68pp; English.
XX
CC   The invention describes a method of identifying a human leukocyte antigen
CC   (HLA) genotype of a subject comprising: obtaining a sample comprising a
CC   template nucleic acid from the subject; amplifying the template nucleic
CC   acid with HLA allele-specific forward primers and HLA allele-specific
CC   reverse primers to form amplification products; hybridising the
CC   amplification products with an HLA locus-specific capture oligonucleotide
CC   ; and detecting the detectable complexes to identify the HLA genotype of
CC   the subject. The present sequence represents one of 276 HLA locus-
CC   specific capture oligonucleotides of the invention.
XX
SQ   Sequence 18 BP; 3 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         503 CTGAGGGCTACCTGGAG 519
               ||||  | ||||||||||
Db          18 CTGAAGCCTACCTGGAG 2


RESULT 1399
ADO58582/c
ID   ADO58582 standard; DNA; 18 BP.
XX
AC   ADO58582;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Rubellimiccrobium rRNA oligonucleotide probe SEQ ID NO:27.
XX
KW   ss; probe; paper; board; in situ hybridisation; anti-biofilm;
KW   agglomerate; biofilm; thermophilic microorganism.
XX
OS   Unidentified.
XX
PN   WO2004042082-A1.
XX
PD   21-MAY-2004.
XX
PF   06-NOV-2003; 2003WO-FI000839.
XX
PR   06-NOV-2002; 2002FI-00001986.
PR   06-NOV-2002; 2002FI-00001987.
XX
PA   (KEMH ) KEMIRA OYJ.
XX
PI   Jurgens G,  Kolari M,  Rainey F,  Salkinoja-Salonen M,  Laatikainen H;
PI   Tammela P,  Vuorela P,  Vaeaetaenen P;
XX
DR   WPI; 2004-419709/39.
XX
PT   Monitoring harmful microorganisms in paper and board industry, involves
PT   detecting presence of harmful target microorganisms by in situ
PT   hybridization using oligonucleotide probe hybridizable to nucleic acid of
PT   target microorganism.
XX
PS   Claim 12; SEQ ID NO 27; 32pp; English.
XX
CC   The invention relates to a novel method for monitoring harmful
CC   microorganisms in the paper and board industry comprising detecting the
CC   presence or absence of the harmful target microorganism by in situ
CC   hybridization using an oligonucleotide probe hybridisable with a region
CC   of a nucleic acid of the target microorganism. The method is useful for
CC   determining the need of an anti-biofilm agent in the paper or board
CC   making process, and for inhibiting the formation of agglomerates and/or
CC   biofilm, and/or removing the agglomerates and/or biofilm which are formed
CC   by thermophilic microorganisms, from the surfaces of paper and board
CC   making machines. the method also enables an efficient and timesaving
CC   process for monitoring the microbiological state of a paper or board
CC   making process, and for the recognition of the microorganism before
CC   process failures emerge. The present sequence represents an
CC   oligonucleotide probe targeted to a region or rRNA of a target
CC   microorganism of the invention.
XX
SQ   Sequence 18 BP; 3 A; 9 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 9.4e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         596 GCTTTGGGAAACTGGAG 612
               || |||||||||||| |
Db          18 GCCTTGGGAAACTGGGG 2


RESULT 1400
AAT11974/c
ID   AAT11974 standard; DNA; 19 BP.
XX
AC   AAT11974;
XX
DT   25-MAR-2003  (revised)
DT   13-MAR-1996  (first entry)
XX
DE   CMV antisense oligonucleotide (ISIS 5478).
XX
KW   antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis;
KW   intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .19
FT                    /*tag=  a
FT                    /note= "phosphorothioate backbone"
```

XX
PN US5442049-A.
XX
PD 15-AUG-1995.
XX
PF 25-JAN-1993; 93US-00009263.
XX
PR 19-NOV-1992; 92US-00927506.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker B, Draper K, Anderson K;
XX
DR WPI; 1995-292538/38.
XX
PT New oligo-nucleotide inhibits cytomegalovirus replication - by binding to
PT a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
PT treatment of CMV diseases.
XX
PS Example 10; Col 17; 66pp; English.
XX
CC AAT11971-84 are antisense oligonucleotides (ONs) against human
CC cytomegalovirus (CMV) that displayed activities of at least 50 % of
CC control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal
CC mismatches could be tolerated without loss of antiviral activity.
CC Antisense ONs targeting CMV DNA or RNA coding for the IE1, IE2 or DNA
CC polymerase proteins have been shown to be effective in therapy,
CC prophylaxis and diagnosis of CMV infection. The ONs may be modified to
CC reduce nuclease resistance and to increase their efficacy. Modifications
CC include phosphorothioate backbones, alkyl and halogen-substituted sugar
CC moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF
CC field.)
XX
SQ Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 133 ATGAAGAAGATCAAACG 149
| |||||||| |||||||
Db 18 AAGAAGAAGAGCAAACG 2

RESULT 1401
AAT01676/c
ID AAT01676 standard; DNA; 19 BP.
XX
AC AAT01676;
XX
DT 17-DEC-1995 (first entry)
XX
DE Peptide nucleic acid targetting CMV IE2 nuc sig 2.
XX
KW peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
KW antiviral; diagnostic; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1. .19
FT /*tag= a
FT /note= "at least one (and preferably all) of the backbone
FT subunits are composed of amide units, so that the
FT oligomer consists of the nucleobases attached covalently
FT to a polyamide backbone"
XX
PN WO9504748-A1.
XX
PD 16-FEB-1995.
XX
PF 09-AUG-1994; 94WO-US009039.
XX
PR 09-AUG-1993; 93US-00104438.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowsert LM;
XX
DR WPI; 1995-090841/12.
XX
PT New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
PT papilloma:virus - are stable anti:sense molecules with high affinity for
PT single stranded DNA, used for treating infections.
XX
PS Claim 2; Page 44; 65pp; English.
XX
CC New oligomers are claimed which (A) have at least one peptide nucleic
CC acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5'
CC untranslated region, intron/exon (I/E) junction or coding sequence of
CC cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or
CC hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a
CC papillomavirus. The PNAs can be used to target RNA and single stranded
CC DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence
CC they may be used therapeutically for modulating cytomegalovirus and
CC papillomavirus processes and also as diagnostics (e.g., as probes for
CC specific mRNAs). PNA oligomers have high affinity for complementary
CC single stranded DNA. They are also able to form triple helices in which a
CC first PNA strand binds with RNA or ssDNA and a second PNA strand binds
CC with the resulting double helix or with the first PNA strand. The PNAs
CC possess no significant charge and are water soluble, which facilitates
CC cellular uptake. Futher, since they contain amides of non-biological
CC amino acids, they are biostable and resistant to enzymatic degradation by
CC proteases. The present sequence targets CMV IE2 nuclear localisation
CC signal 2
XX
SQ Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 133 ATGAAGAAGATCAAACG 149
| |||||||| |||||||
Db 18 AAGAAGAAGAGCAAACG 2

RESULT 1402
AAT67044/c
ID AAT67044 standard; DNA; 19 BP.
XX
AC AAT67044;
XX
DT 04-AUG-1997 (first entry)
XX
DE PCR primer DP17 for org gene probe preparation.
XX
KW Salmonella typhimurium; org gene; polymerase chain reaction; PCR; primer;
KW oxygen-regulated gene; ss.
XX
OS Synthetic.
XX
PN WO9718225-A1.
XX
PD 22-MAY-1997.
XX
PF 14-NOV-1996; 96WO-US018504.
XX
PR 14-NOV-1995; 95US-0006733P.
XX
PA (GEHO) GEN HOSPITAL CORP.
XX
PI Miller SI;
XX
DR WPI; 1997-289217/26.
XX

```
PT   New isolated Salmonella secreted proteins and related genes - used to
PT   develop products for the detection, treatment or prevention of Salmonella
PT   infections.
XX
PS   Example 1; Page 29; 95pp; English.
XX
CC   PCR primers DP15 (AAT67043) and DP17 (AAT67044) were used to amplify a
CC   724-bp org gene probe. The probe can be used to identify the Salmonella
CC   typhimurium oxygen-regulated gene (org)
XX
SQ   Sequence 19 BP; 2 A; 7 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1272 GGAGACGTGGCCAGGCA 1288
              |||||  ||||||||||
Db         18 GGAGAACTGGCCAGGCA 2


RESULT 1403
AAX10245
ID   AAX10245 standard; DNA; 19 BP.
XX
AC   AAX10245;
XX
DT   24-MAR-1999  (first entry)
XX
DE   Human biallelic polymorphic marker downstream primer #551.
XX
KW   Polymorphism; biallelic; human; forensic; paternity testing; disease;
KW   detection; phenotypic typing; characteristic; infection; hereditary;
KW   autoimmune disease; cancer; inflammation; drug; therapy; medicament;
KW   treatment; marker; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9820165-A2.
XX
PD   14-MAY-1998.
XX
PF   05-NOV-1997;   97WO-US020313.
XX
PR   06-NOV-1996;   96US-0030455P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   Lander ES,  Wang D,  Hudson T;
XX
DR   WPI; 1998-286974/25.
XX
PT   New isolated nucleic acid segments from the human genome - used for
PT   determining polymorphic forms for use in e.g. forensics, paternity
PT   testing or phenotypic typing for disease.
XX
PS   Claim 16; Page 219; 310pp; English.
XX
CC   AAX09121-X10268 are allele-specific oligonucleotide primers used in the
CC   isolation of various biallelic polymorphic markers found in the human
CC   genome (represented in AAX10269-X12937). These primers can be used in a
CC   method for determining polymorphic forms in an individual for use in e.g.
CC   forensics, paternity testing or for phenotypic typing for diseases such
CC   as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC   dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial
CC   hypercholesterolemia, polycystic kidney disease, hereditary
CC   spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
CC   haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
CC   syndrome, osteogenesis imperfecta, acute intermittent porphyria,
CC   autoimmune diseases, inflammation, cancer, diseases of the nervous
CC   system, infection by pathogenic microorganisms, and characteristics such
CC   as longevity, appearance (e.g. baldness, obesity), strength, speed,
CC   endurance, fertility, and susceptibility or receptivity to particular
CC   drugs or therapeutic treatments. The isolated polymorphic nucleic acid
CC   segments can also be used to produce medicaments for the treatment or
CC   prophylaxis of such diseases
XX
SQ   Sequence 19 BP; 8 A; 6 C; 4 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1297 AACGAGGAGTTCAAGAC 1313
              ||| ||||| |||||||
Db          1 AACCAGGAGCTCAAGAC 17


RESULT 1404
AAV01575
ID   AAV01575 standard; DNA; 19 BP.
XX
AC   AAV01575;
XX
DT   01-JUN-1998  (first entry)
XX
DE   H. capsulatum rRNA ITS1 primer 1724F.
XX
KW   Internal transcribed spacer; ITS; ribosomal RNA; 18S; 5.8S; ss; primer;
KW   PCR; amplification; probe; hybridisation; detection; histoplasmosis.
XX
OS   Synthetic.
OS   Ajellomyces capsulatus.
XX
PN   US5693501-A.
XX
PD   02-DEC-1997.
XX
PF   08-MAR-1995;   95US-00400580.
XX
PR   08-MAR-1995;   95US-00400580.
XX
PA   (INDV ) UNIV INDIANA ADVANCED RES & TECHNOLOGY.
XX
PI   Jiang B,  Lee C;
XX
DR   WPI; 1998-031751/03.
XX
PT   Histoplasma capsulatum DNA sequences - useful as primers for diagnosing
PT   histoplasmosis.
XX
PS   Example 1; Col 5; 10pp; English.
XX
CC   Primers AAV01575-V01576 were used to amplify the internal transcribed
CC   spacer 1 (ITS1) sequence from the Histoplasma capsulatum large subunit
CC   ribosomal genes (AAV01567). The ITS1 sequence corresponds to the region
CC   between the 3' end of the 18S ribosomal gene and the 5' end of the 5.8S
CC   ribosomal gene. The ITS1 sequence was PCR amplified from isolated DNA
CC   from both the yeast and mycelial forms of H. capsulatum. Fragments of the
CC   sequence (e.g. AAV01568-V01574) can be used as primers and probes for H.
CC   capsulatum infection (histoplasmosis) in a patient
XX
SQ   Sequence 19 BP; 5 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        622 AAGCTGGACAAACTGGG 638
              ||||||| |||||| ||
Db          1 AAGCTGGTCAAACTTGG 17


RESULT 1405
AAX17891/c
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```
ID   AAX17891 standard; DNA; 19 BP.
XX
AC   AAX17891;
XX
DT   11-MAY-1999  (first entry)
XX
DE   Anti-CMV oligonucleotide #5478.
XX
KW   Antisense; oligonucleotide; immediate early; DNA polymerase; CMV;
KW   cytomegalovirus; inhibition; replication; sugar modification;
KW   phosphorothioate; infection; retinitis; ss.
XX
OS   Synthetic.
OS   Human herpesvirus 5.
XX
PN   WO9845314-A1.
XX
PD   15-OCT-1998.
XX
PF   07-APR-1998;   98WO-US006895.
XX
PR   09-APR-1997;   97US-00838715.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Draper KG,  Kisner DL,  Anderson KP,  Chapman S;
XX
DR   WPI; 1998-568330/48.
XX
PT   New antisense oligonucleotides that target cytomegalovirus nucleic acid -
PT   particularly including 2-methoxyethoxy sugar modifications, especially
PT   for treating viral retinitis, with long-lasting retention in the retina.
XX
PS   Claim 7; Page 30; 99pp; English.
XX
CC   Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic
CC   acid (AAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA
CC   polymerase of cytomegalovirus (CMV) and are able to inhibit CMV
CC   replication. Optionally the oligonucleotides include at least one 2'-(2-
CC   methoxyethoxy) sugar modification or phosphorothioate internucleotide
CC   linkages. The oligonucleotides are used to inhibit CMV infections (by in
CC   vivo or in vitro contact with cells, tissues or body fluids), especially
CC   to treat or prevent CMV infections, particularly retinitis
XX
SQ   Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        133 ATGAAGAAGATCAAACG 149
              | ||||||||| ||||||
Db         18 AAGAAGAAGAGCAAACG 2


RESULT 1406
AAX04627/c
ID   AAX04627 standard; DNA; 19 BP.
XX
AC   AAX04627;
XX
DT   12-APR-1999  (first entry)
XX
DE   PCR primer Tua4R used to amplify alpha-tubulin.
XX
KW   Gibberellin 4; GA4; beta-hydroxylase; GA4 homologue; GA4H; GA4H1; GA4H2;
KW   plant growth hormone; seed germination; stem elongation; flowering;
KW   fruiting; stem growth; alpha-tubulin; PCR primer; ss.
XX
OS   Synthetic.
XX
PN   WO9859057-A1.
XX
PD   30-DEC-1998.
XX
PF   24-JUN-1998;   98WO-US013044.
XX
PR   24-JUN-1997;   97US-0050615P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (GOOD/) GOODMAN H M.
PA   (NGUY/) NGUYEN L V.
PA   (CHIA/) CHIANG H.
XX
PI   Goodman HM,  Nguyen LV,  Chiang H;
XX
DR   WPI; 1999-105626/09.
XX
PT   New isolated Gibberellin 4 homologues - derived from Arabidopsis plants,
PT   used to develop products for altering stem growth, e.g. for enhancing
PT   stem elongation, flowering and fruiting.
XX
PS   Example 5; Page 33; 106pp; English.
XX
CC   PCR primers AAX04626-27 were used to amplify the alpha-tubulin 4 gene.
CC   The primers are used as an internal control when determining expression
CC   of the GA4H1 gene. GA4H1 is a gibberellin 4 (GA4) homologue. The GA4H
CC   proteins (GA4H1 and GA4H2) have similar functions to GA4. GA4H is
CC   believed to be a member of the enzyme family involved in the biosynthesis
CC   of the gibberellin family of plant growth hormones that promote various
CC   growth and developmental processes in higher plants, such as seed
CC   germination, stem elongation, flowering and fruiting. GA4 is a beta-
CC   hydroxylase, and the homologues may also have 3-beta-hydroxylase
CC   activity, which is critical for controlling stem growth. GA4H may be
CC   applied to crops to enhance and facilitate stem elongation, flowering and
CC   fruiting. Alternatively, the DNA encoding GA4H may be genetically
CC   inserted into the plant host to produce a similar effect
XX
SQ   Sequence 19 BP; 3 A; 6 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1517 TAAAGGAGATTCAGCTA 1533
              ||||| |||| ||||||
Db         17 TAAAGAAGATGCAGCTA 1


RESULT 1407
AAZ36588/c
ID   AAZ36588 standard; DNA; 19 BP.
XX
AC   AAZ36588;
XX
DT   22-FEB-2000  (first entry)
XX
DE   Probe hybridising to nucleotides of human c-erb-B-2 (HER-2).
XX
KW   Human; c-erb-B-2; HER-2; chromosome aberration; probe;
KW   peptide nucleic acid; haemapoietic malignancy; cancer;
KW   inborn constituel disease; herbicide resistance gene; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9957309-A1.
XX
PD   11-NOV-1999.
XX
PF   04-MAY-1999;   99WO-DK000245.
XX
PR   04-MAY-1998;   98DK-00000615.
XX
PA   (DAKO-) DAKO AS.
XX
```

```
PI   Pluzek K,  Nielsen KV,  Adelhorst K;
XX
DR   WPI; 2000-038821/03.
XX
PT   Detection of chromosome aberrations, used for detecting diseases and
PT   disorders, infections, and plant alterations related to e.g. herbicide
PT   resistance.
XX
PS   Example 1; Page 44; 63pp; English.
XX
CC   Oligonucleotides AAZ36562-97 represent a set of probes hybridising to the
CC   human c-erb-B-2 (HER-2) gene. The probes are used to demonstrate the
CC   method of the invention. The specification describes a method for the
CC   detection of chromosome aberrations in eukaryotic samples uses sets of
CC   peptide nucleic acid (PNA) probes in hybridisation reactions. The method
CC   comprises using at least 2 sets of hybridisation probes, where at least
CC   one set comprises one or more PNA probes capable of hybridising to
CC   specific nucleic acid sequences related to a potential aberration in a
CC   chromosome. The methods can be used for the detection of chromosome
CC   aberrations. They can be used for the diagnosis of disorders and diseases
CC   related to chromosomal aberrations or abnormalities such as e.g.
CC   haemapoietic malignancies, cancers and inborn constituel diseases. The
CC   method may be used for detecting viral sequences and their localization
CC   in the chromosome. In plant biology, the methods can be used for
CC   monitoring the efficiency of transferring herbicide resistance genes to a
CC   plant
XX
SQ   Sequence 19 BP; 3 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        654 CACCGTCTACAAAGGCA 670
              ||| |||||||| ||||
Db         18 CACAGTCTACAAGGGCA 2


RESULT 1408
AAA82434
ID   AAA82434 standard; DNA; 19 BP.
XX
AC   AAA82434;
XX
DT   04-DEC-2000  (first entry)
XX
DE   cdk1 ribozyme binding site #20.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US028772.
XX
PR   04-DEC-1998;   98US-0110954P.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1.
XX
PS   Disclosure; Page 46; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells. The
CC   ribozyme is resistant to endonuclease activity and hence is efficient in
CC   restenosis treatment
XX
SQ   Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1138 TACTCCACTCAGATTGA 1154
              ||||||||||||  ||
Db          1 TACTCCACTCAGAAAGA 17


RESULT 1409
AAA82874
ID   AAA82874 standard; DNA; 19 BP.
XX
AC   AAA82874;
XX
DT   04-DEC-2000  (first entry)
XX
DE   cdk4 ribozyme binding site #55.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US028772.
XX
PR   04-DEC-1998;   98US-0110954P.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1.
XX
PS   Disclosure; Page 53; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells. The
CC   ribozyme is resistant to endonuclease activity and hence is efficient in
CC   restenosis treatment
XX
SQ   Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        973 CACCGAGACCTCAAGCC 989
              ||||||| || |||||
Db          1 CACCGAGATCTGAAGCC 17
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```
RESULT 1410
AAA82729
ID   AAA82729 standard; DNA; 19 BP.
XX
AC   AAA82729;
XX
DT   04-DEC-2000  (first entry)
XX
DE   cdk3 ribozyme binding site #14.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US028772.
XX
PR   04-DEC-1998;   98US-0110954P.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1.
XX
PS   Disclosure; Page 50; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells. The
CC   ribozyme is resistant to endonuclease activity and hence is efficient in
CC   restenosis treatment
XX
SQ   Sequence 19 BP; 4 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        760 TCCCTGCTCAAGGACCT 776
              || |||||||||| ||
Db          2 TCGCTGCTCAAGGAACT 18


RESULT 1411
AAA84423
ID   AAA84423 standard; DNA; 19 BP.
XX
AC   AAA84423;
XX
DT   04-DEC-2000  (first entry)
XX
DE   Cyclin D3 ribozyme binding site #35.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US028772.
XX
PR   04-DEC-1998;   98US-0110954P.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1.
XX
PS   Disclosure; Page 76; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells. The
CC   ribozyme is resistant to endonuclease activity and hence is efficient in
CC   restenosis treatment
XX
SQ   Sequence 19 BP; 3 A; 3 C; 9 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        272 GTGCTGCTCCTGGGGAA 288
              |||||| |||| |||||
Db          2 GTGCTGGTCCTAGGGAA 18


RESULT 1412
AAA82887
ID   AAA82887 standard; DNA; 19 BP.
XX
AC   AAA82887;
XX
DT   04-DEC-2000  (first entry)
XX
DE   cdk4 ribozyme binding site #68.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US028772.
XX
PR   04-DEC-1998;   98US-0110954P.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1.
XX
PS   Disclosure; Page 53; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
```

```
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells. The
CC   ribozyme is resistant to endonuclease activity and hence is efficient in
CC   restenosis treatment
XX
SQ   Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1090 GTGACACTGTGGTACCG 1106
              || ||||| ||||||||
Db          2 GTTACACTCTGGTACCG 18


RESULT 1413
AAA83020
ID   AAA83020 standard; DNA; 19 BP.
XX
AC   AAA83020;
XX
DT   04-DEC-2000  (first entry)
XX
DE   cdk6 ribozyme binding site #80.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US028772.
XX
PR   04-DEC-1998;   98US-0110954P.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1.
XX
PS   Disclosure; Page 55; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells. The
CC   ribozyme is resistant to endonuclease activity and hence is efficient in
CC   restenosis treatment
XX
SQ   Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1159 TGGGGTGTGGGCTGCAT 1175
              ||| |||| ||||||||
Db          2 TGGAGTGTTGGCTGCAT 18


RESULT 1414
AAA82748
ID   AAA82748 standard; DNA; 19 BP.
XX
AC   AAA82748;
XX
DT   04-DEC-2000  (first entry)
XX
DE   cdk3 ribozyme binding site #33.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US028772.
XX
PR   04-DEC-1998;   98US-0110954P.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1.
XX
PS   Disclosure; Page 51; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells. The
CC   ribozyme is resistant to endonuclease activity and hence is efficient in
CC   restenosis treatment
XX
SQ   Sequence 19 BP; 2 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        919 TTCCTGTTCCAGCTGCT 935
              | ||| ||||||||||
Db          3 TACCTCTTCCAGCTGCT 19


RESULT 1415
AAA82639
ID   AAA82639 standard; DNA; 19 BP.
XX
AC   AAA82639;
XX
DT   04-DEC-2000  (first entry)
XX
DE   cdk2 ribozyme binding site #76.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US028772.
XX
PR   04-DEC-1998;   98US-0110954P.
XX
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```
PA   (IMMU-) IMMUSOL INC.
XX
PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1.
XX
PS   Disclosure; Page 49; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells. The
CC   ribozyme is resistant to endonuclease activity and hence is efficient in
CC   restenosis treatment
XX
SQ   Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1022 TCAAGCTGGCTGACTTT 1038
              ||||||| || ||||||
Db          3 TCAAGCTAGCAGACTTT 19


RESULT 1416
AAA82749
ID   AAA82749 standard; DNA; 19 BP.
XX
AC   AAA82749;
XX
DT   04-DEC-2000  (first entry)
XX
DE   cdk3 ribozyme binding site #34.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US028772.
XX
PR   04-DEC-1998;   98US-0110954P.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1.
XX
PS   Disclosure; Page 51; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells. The
CC   ribozyme is resistant to endonuclease activity and hence is efficient in
CC   restenosis treatment
XX
SQ   Sequence 19 BP; 2 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        919 TTCCTGTTCCAGCTGCT 935
              | ||| ||||||||||
Db          2 TACCTCTTCCAGCTGCT 18


RESULT 1417
AAF91202
ID   AAF91202 standard; DNA; 19 BP.
XX
AC   AAF91202;
XX
DT   04-MAY-2001  (first entry)
XX
DE   Human multi drug resistance-1 gene related sequence SEQ ID NO: 289.
XX
KW   Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;
KW   inflammatory disease; neuronal disease; CNS disease;
KW   cardiovascular disease; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200109183-A2.
XX
PD   08-FEB-2001.
XX
PF   28-JUL-2000; 2000WO-EP007314.
XX
PR   30-JUL-1999;   99EP-00114938.
PR   22-FEB-2000; 2000EP-00103361.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Brinkmann U,  Hoffmeyer S,  Eichelbaum M,  Roots I;
XX
DR   WPI; 2001-159855/16.
XX
PT   New polynucleotide encoding a molecular variant Multi Drug Resistance
PT   (MDR)-1 polypeptide is useful for diagnosing and treating diseases
PT   associated with abnormal MDR-1 expression or function, e.g. cancer.
XX
PS   Disclosure; Page 136; 154pp; English.
XX
CC   The present invention provides nucleotides encoding molecular variants of
CC   the human multi drug resistance-1 (MDR-1) protein. These can be used to
CC   identify compounds capable of treating multidrug resistance and
CC   sensitivity interfering resulting from polymorphisms in MDR-1, which can
CC   lead to difficulties in treating cancer, cardiovascular, neuronal,
CC   inflammatory and CNS diseases
XX
SQ   Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   78.9%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        388 TCCTCGGATGAGGTGCAGT 406
              ||||| || :| |||||||
Db          1 TCCTCTGAGRATGTGCAGT 19


RESULT 1418
AAF91204/c
ID   AAF91204 standard; DNA; 19 BP.
XX
AC   AAF91204;
```

XX
DT 04-MAY-2001 (first entry)
XX
DE Human multi drug resistance-1 gene related sequence SEQ ID NO: 291.
XX
KW Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;
KW inflammatory disease; neuronal disease; CNS disease;
KW cardiovascular disease; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200109183-A2.
XX
PD 08-FEB-2001.
XX
PF 28-JUL-2000; 2000WO-EP007314.
XX
PR 30-JUL-1999; 99EP-00114938.
PR 22-FEB-2000; 2000EP-00103361.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;
XX
DR WPI; 2001-159855/16.
XX
PT New polynucleotide encoding a molecular variant Multi Drug Resistance
PT (MDR)-1 polypeptide is useful for diagnosing and treating diseases
PT associated with abnormal MDR-1 expression or function, e.g. cancer.
XX
PS Disclosure; Page 137; 154pp; English.
XX
CC The present invention provides nucleotides encoding molecular variants of
CC the human multi drug resistance-1 (MDR-1) protein. These can be used to
CC identify compounds capable of treating multidrug resistance and
CC sensitivity interfering resulting from polymorphisms in MDR-1, which can
CC lead to difficulties in treating cancer, cardiovascular, neuronal,
CC inflammatory and CNS diseases
XX
SQ Sequence 19 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 9.8e+02;
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 388 TCCTCGGATGAGGTGCAGT 406
||||| || :| |||||||
Db 19 TCCTCTGAGRATGTGCAGT 1

RESULT 1419
AAH58036
ID AAH58036 standard; DNA; 19 BP.
XX
AC AAH58036;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:460.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 105; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnerary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 973 CACCGAGACCTCAAGCC 989
||||||||| || |||||
Db 1 CACCGAGATCTGAAGCC 17

RESULT 1420
AAH59585
ID AAH59585 standard; DNA; 19 BP.
XX
AC AAH59585;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cyclin D3 ribozyme binding site SEQ ID NO:2009.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX

OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 218; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnerary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 3 A; 3 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 272 GTGCTGCTCCTGGGGAA 288
||||||| |||| |||||
Db 2 GTGCTGGTCCTAGGGAA 18

RESULT 1421
AAH57801
ID AAH57801 standard; DNA; 19 BP.
XX
AC AAH57801;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:225.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 88; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnerary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 6 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1022 TCAAGCTGGCTGACTTT 1038
||||||| || ||||||
Db 3 TCAAGCTAGCAGACTTT 19

RESULT 1422
AAH58182
ID AAH58182 standard; DNA; 19 BP.
XX
AC AAH58182;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk6 ribozyme binding site SEQ ID NO:606.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;

KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 116; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnerary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 3 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1159 TGGGGTGTGGGCTGCAT 1175
|||| |||| ||||||||
Db 2 TGGAGTGTTGGCTGCAT 18

RESULT 1423
AAH57891
ID AAH57891 standard; DNA; 19 BP.
XX
AC AAH57891;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:315.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 94; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnerary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 4 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 760 TCCCTGCTCAAGGACCT 776
|| |||||||||||| ||
Db 2 TCGCTGCTCAAGGAACT 18

RESULT 1424
AAH57910
ID AAH57910 standard; DNA; 19 BP.
XX
AC AAH57910;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:334.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;

KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 96; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnerary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 2 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 919 TTCCTGTTCCAGCTGCT 935
|| ||| ||||||||||
Db 3 TACCTCTTCCAGCTGCT 19

RESULT 1425
AAH58049
ID AAH58049 standard; DNA; 19 BP.
XX
AC AAH58049;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:473.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US029500.
XX
PR 26-OCT-1999; 99US-0161532P.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using ribozymes
PT that cleave RNA encoding cytokines involved in inflammation, matrix
PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS Example 1; Page 106; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnerary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative skin
CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1090 GTGACACTGTGGTACCG 1106
|| ||||| ||||||||
Db 2 GTTACACTCTGGTACCG 18

RESULT 1426
AAH57596
ID AAH57596 standard; DNA; 19 BP.
XX
AC AAH57596;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk1 ribozyme binding site SEQ ID NO:20.

```
XX
KW   Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW   recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW   proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW   cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW   matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW   antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW   antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW   atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW   basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW   sickle cell retinopathy; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200130362-A2.
XX
PD   03-MAY-2001.
XX
PF   26-OCT-2000; 2000WO-US029500.
XX
PR   26-OCT-1999;   99US-0161532P.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Robbins JM,  Tritz R;
XX
DR   WPI; 2001-300427/31.
XX
PT   Treating proliferative skin or eye diseases and scarring, using ribozymes
PT   that cleave RNA encoding cytokines involved in inflammation, matrix
PT   metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS   Example 1; Page 73; 408pp; English.
XX
CC   The present invention describes a method for treating a proliferative
CC   skin or eye disease and scarring. The method involves administering a
CC   ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC   inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC   dependent kinase, growth factor or a reductase, or administering a
CC   nucleic acid molecule (II) comprising a promoter operably linked to a
CC   nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC   dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC   ophthalmological, vulnerary, keratolytic and virucide activities, and
CC   cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC   in gene therapy. (I) and (II) are useful for treating proliferative skin
CC   diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC   squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC   also be used for treating proliferative eye diseases such as diabetic
CC   retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC   prematurity and retinal detachment, and for treating and preventing
CC   scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC   scar. AAH57577 to AAH62099 represent sequences used in the
CC   exemplification of the present invention
XX
SQ   Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1138 TACTCCACTCAGATTGA 1154
              ||||||||||||  ||
Db          1 TACTCCACTCAGAAAGA 17


RESULT 1427
AAH57911
ID   AAH57911 standard; DNA; 19 BP.
XX
AC   AAH57911;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:335.
XX
KW   Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW   recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW   proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW   cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW   matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW   antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW   antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW   atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW   basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW   sickle cell retinopathy; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200130362-A2.
XX
PD   03-MAY-2001.
XX
PF   26-OCT-2000; 2000WO-US029500.
XX
PR   26-OCT-1999;   99US-0161532P.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Robbins JM,  Tritz R;
XX
DR   WPI; 2001-300427/31.
XX
PT   Treating proliferative skin or eye diseases and scarring, using ribozymes
PT   that cleave RNA encoding cytokines involved in inflammation, matrix
PT   metalloproteinases, growth factors and cell-cycle dependent kinases.
XX
PS   Example 1; Page 96; 408pp; English.
XX
CC   The present invention describes a method for treating a proliferative
CC   skin or eye disease and scarring. The method involves administering a
CC   ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC   inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC   dependent kinase, growth factor or a reductase, or administering a
CC   nucleic acid molecule (II) comprising a promoter operably linked to a
CC   nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC   dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC   ophthalmological, vulnerary, keratolytic and virucide activities, and
CC   cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC   in gene therapy. (I) and (II) are useful for treating proliferative skin
CC   diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC   squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC   also be used for treating proliferative eye diseases such as diabetic
CC   retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC   prematurity and retinal detachment, and for treating and preventing
CC   scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC   scar. AAH57577 to AAH62099 represent sequences used in the
CC   exemplification of the present invention
XX
SQ   Sequence 19 BP; 2 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        919 TTCCTGTTCCAGCTGCT 935
              | ||| ||||||||||||
Db          2 TACCTCTTCCAGCTGCT 18


RESULT 1428
ABS67829/c
ID   ABS67829 standard; DNA; 19 BP.
XX
AC   ABS67829;
```

XX
DT 29-NOV-2002 (first entry)
XX
DE Human casein kinase 2-alpha prime DNA, PCR primer #2.
XX
KW Human; casein kinase 2-alpha prime; diabetes mellitus;
KW hyperproliferative disorder; breast cancer; prostate cancer;
KW liver cancer; infection; inflammation; tumour formation; cytostatic;
KW antidiabetic; antiinflammatory; antimicrobial; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200262951-A2.
XX
PD 15-AUG-2002.
XX
PF 01-FEB-2002; 2002WO-US002772.
XX
PR 08-FEB-2001; 2001US-00780173.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Mckay R, Freier SM, Wyatt JR;
XX
DR WPI; 2002-627539/67.
XX
PT New antisense oligonucleotides targeted to nucleic acid encoding casein
PT kinase 2-alpha prime, useful for diagnosing and/or treating a disease or
PT condition associated with expression of casein kinase 2-alpha prime.
XX
PS Example 13; Page 91; 129pp; English.
XX
CC The present invention relates to antisense oligonucleotides and methods
CC for modulating the expression of human or mouse casein kinase 2-alpha
CC prime. The antisense oligonucleotides are useful for inhibiting the
CC expression of casein kinase 2-alpha prime, and for treating diseases or
CC conditions associated with aberrant expression of casein kinase 2-alpha
CC prime. Such diseases include diabetes mellitus, and hyperproliferative
CC disorders (particularly cancers e.g. breast cancer, prostate cancer, or
CC liver cancer). The antisense compounds are also useful for diagnostics,
CC therapeutics, prophylaxis, e.g. to prevent or delay infection,
CC inflammation or tumour formation, as research reagents and kits, and in
CC distinguishing between functions of various members of a biological
CC pathway. The present sequence represents a PCR primer used to amplify DNA
CC encoding human casein kinase 2-alpha prime in the examples of the present
CC invention
XX
SQ Sequence 19 BP; 1 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1364 GACTTGATAGCGACGGG 1380
||||| || |||||||||
Db 17 GACTGGAAAGCGACGGG 1

RESULT 1429
AAK98357/c
ID AAK98357 standard; DNA; 19 BP.
XX
AC AAK98357;
XX
DT 08-MAY-2002 (first entry)
XX
DE Chinese hamster HMG-I(Y) PCR primer.
XX
KW Chinese hamster; expression augmenting sequence element; EASE; HMG-I(Y);
KW recombinant protein expression; mammalian host cell; PCR; primer; ss;
KW high mobility group; nonhistone chromatin protein;
KW architectural transcription factor.
XX
OS Cricetulus griseus.
XX
PN US6309841-B1.
XX
PD 30-OCT-2001.
XX
PF 12-SEP-2000; 2000US-00660299.
XX
PR 11-JAN-1996; 96US-00586509.
PR 13-JAN-1997; 97US-00785150.
PR 05-NOV-1999; 99US-00435377.
XX
PA (IMMV) IMMUNEX CORP.
XX
PI Morris AE, Thomas JN;
XX
DR WPI; 2002-033281/04.
XX
PT New expression augmenting sequence elements isolated from a Chinese
PT hamster ovary cell line improve expression of recombinant proteins in
PT host mammalian cells.
XX
PS Example 16; Col 22; 25pp; English.
XX
CC The invention comprises Chinese hamster expression augmenting sequence
CC elements (EASEs; AAK98343-AAK98344) that can be used to improve
CC expression of recombinant proteins in mammalian host cells. The EASE
CC sequences of the invention contain numerous binding sites for members of
CC the HMG-I(Y) ("high mobility group") family of nonhistone chromatin
CC proteins, a group of minor groove-binding architectural transcription
CC factors which are thought to be involved in the mechanisms by which EASE
CC sequences improve expression of transgenes. The EASEs of the invention
CC can also be used in the identification of additional EASE sequences (e.g.
CC from other transformed cell lines which exhibit high levels of expression
CC not attributable to a high gene copy number). Expression of recombinant
CC therapeutic proteins in mammalian cells is often preferable to expression
CC in microbial (prokaryotic) cells, since the post-translational
CC modifications found in mammalian cells are more likely to resemble those
CC found in a mammal. The present sequence represents a Chinese hamster high
CC mobility group nonhistone chromatin protein-I(Y) (HMG-I(Y)) PCR primer,
CC used in an example of the invention to clone the Chinese hamster HMG-I(Y)
CC gene
XX
SQ Sequence 19 BP; 2 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 390 CTCGGATGAGGTGCAGT 406
||||| |||| |||||
Db 19 CTCGGAGGAGGAGCAGT 3

RESULT 1430
ABL43700
ID ABL43700 standard; DNA; 19 BP.
XX
AC ABL43700;
XX
DT 11-APR-2002 (first entry)
XX
DE Human chromosome 1p36-35 PCR primer SEQ ID NO:744.
XX
KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
PN JP2001321190-A.
XX
PD 20-NOV-2001.
XX

```
PF   12-MAR-2001; 2001JP-00068285.
XX
PR   10-MAR-2000; 2000JP-00066716.
XX
PA   (RIKA ) RIKAGAKU KENKYUSHO.
PA   (GENO-) GENOTEX YG.
XX
DR   WPI; 2002-144136/19.
XX
PT   Arraying genome clones.
XX
PS   Claim 4; Page 19; 528pp; Japanese.
XX
CC   The present invention describes a method of arraying genome clones. The
CC   method comprises: (a) clones of the genomic libraries contained in
CC   multiwell plates numbered for discrimination are mixed in each of the
CC   multiwell plates; (b) a primer designed based on the chromosome marker
CC   sequence is added to the mixture to carry out an amplification reaction;
CC   (c) a signal corresponding to the marker is detected from the resultant
CC   amplified product to specify the discrimination Nos. of the multiwell
CC   plates containing the clones having said marker sequence; (d) the order
CC   of the markers is changed so that the same discrimination Nos. succeed to
CC   the maximum in the specified discrimination Nos. to array the multiwell
CC   plates; (e) the clones in the multiwell plates of the specified
CC   discrimination Nos. are mixed respectively in each wells of longitudinal
CC   and lateral directions; (f) the mixed clones are cultured and the
CC   resultant cultures are amplified by using the above primer; (g) signals
CC   are detected from the amplified products; (h) the clones in the multiwell
CC   plates are specified from the detected result; and (i) the clones are
CC   reconstituted as the positions on the chromosome and arrayed. The
CC   microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC   PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC   represent PCR primers for human chromosome 21q22.1, which are
CC   specifically claimed for use in the present invention
XX
SQ   Sequence 19 BP; 5 A; 3 C; 9 G; 2 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        874 CTGGATGACTGTGGGAA 890
              ||||| ||||| |||||
Db          1 CTGGAGGACTGAGGGAA 17


RESULT 1431
ABS97865/c
ID   ABS97865 standard; DNA; 19 BP.
XX
AC   ABS97865;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human UDP-glucuronosyl transferase 24B gene PCR primer #2.
XX
KW   Human; ss; primer; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1; PCR;
KW   cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;
KW   adrenergic receptor beta1; ADBR1; aryl hydrocarbon; AHR; MRP3; NR1I2;
KW   aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
KW   cyclooxgenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
KW   epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
KW   glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
KW   HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
KW   NADPH quinone oxidoreductase 2; NQO2; sulfotransferase thermolabile; STM;
KW   UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
KW   UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;
KW   multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
KW   multidrug resistance associated protein 3; cancer; prostate;
KW   acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
KW   altered drug metabolism; cardiovascular function; colorectal tumour;
KW   central nervous system; pulmonary; immunological.
XX
OS   Homo sapiens.
XX
PN   WO200257410-A2.
XX
PD   25-JUL-2002.
XX
PF   28-NOV-2001; 2001WO-US044838.
XX
PR   28-NOV-2000; 2000US-00724389.
XX
PA   (DNAS-) DNA SCI LAB INC.
XX
PI   Guida M,  Hall J;
XX
DR   WPI; 2002-698522/75.
XX
PT   Isolated nucleic acid molecules having polymorphisms in known human genes
PT   e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers
PT   for locating, identifying and characterizing the genes responsible for
PT   disorder-related traits.
XX
PS   Example 18; Page 133; 714pp; English.
XX
CC   This invention relates to the sequence of an isolated nucleic acid
CC   molecule comprising at least one base variation from that of a known
CC   human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
CC   cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),
CC   aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC   (ARNT), cathepsin S (CTSS), cyclooxgenase 2 (COX2), diazepam binding
CC   inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
CC   protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
CC   transferase (HNMT), (kallikrein 2) KLK2, nicotinamide -N-methyl
CC   transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC   sulfotransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC   (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC   transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance 1
CC   (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
CC   (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic
CC   receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
CC   The polymorphisms in the human genes cited in the invention are useful as
CC   genetic linkage markers for locating and characterising the genes that
CC   are responsible for specific traits within the genome and eventually
CC   identifying the genes responsible for a variety of disorder-related
CC   traits as a result of their e.g., overexpression, constitutive
CC   expression, mutation or underexpression, which may be used in diagnosing
CC   and/or treating the disorders. The nucleic acid molecules comprising the
CC   polymorphic sequences contained in CYP4501A1, CYPP4501A2, CYP4502E1,
CC   ARNT, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
CC   MDR1 and/or MDR3 are useful for screening individuals for altered drug
CC   metabolism. The polymorphic sequences contained in CYP4501A1, CYPP4501A2,
CC   AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC   susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
CC   used to screen for altered cardiovascular function, in COX2 for altered
CC   susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
CC   nervous system function, in FLAP and HNMT for altered pulmonary,
CC   immunological or haematological function, in KLK2 for altered serine
CC   protease activity in the prostate, in LTF for altered immunological or
CC   haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC   peripheral nervous system function. The present sequence represents a PCR
CC   primer used to amplify the sequences of the invention
XX
SQ   Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        859 GACCTGAAGCAGTACCT 875
              ||||||||| | |||||
Db         19 GACCTGAAGGAATACCT 3


RESULT 1432
```

```
ABL95971/c
ID   ABL95971 standard; DNA; 19 BP.
XX
AC   ABL95971;
XX
DT   19-JUN-2002  (first entry)
XX
DE   Probe #46 for assaying nucleic acids.
XX
KW   Probe; polymorphism detection; mutation detection; disease diagnosis;
KW   microbial identification; ss.
XX
OS   Unidentified.
XX
PN   WO200208414-A1.
XX
PD   31-JAN-2002.
XX
PF   27-JUN-2001; 2001WO-IB001147.
XX
PR   27-JUN-2000; 2000JP-00193133.
PR   03-AUG-2000; 2000JP-00236115.
PR   26-SEP-2000; 2000JP-00292483.
XX
PA   (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
PA   (KANK-) KANKYO ENG CO LTD.
XX
PI   Kurane R,  Kanagawa T,  Kamagata Y,  Torimura M,  Kurata S,  Yamada K;
PI   Yokomaku T;
XX
DR   WPI; 2002-195876/25.
XX
PT   Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
PT   their polymorphism and mutation, particularly useful in science and
PT   medicine for e.g. analytical applications, disease diagnosis and
PT   microbial identification.
XX
PS   Example 42; Page 108; 152pp; Japanese.
XX
CC   The present invention relates to nucleic acid probes, which are useful
CC   for assaying nucleic acids by hybridising with a target nucleic acid, in
CC   which a single-stranded oligonucleotide is labelled with a fluorescent
CC   substance and a quencher in a manner that the fluorescence intensity of
CC   the hybridisation reaction system is increased after completion of the
CC   hybridisation but no stem loop structure is formed. The probes are useful
CC   for assaying nucleic acids and their polymorphism and mutation,
CC   particularly useful for e.g. analytical applications, disease diagnosis
CC   and microbial identification. The present sequence was used to illustrate
CC   the invention
XX
SQ   Sequence 19 BP; 5 A; 5 C; 7 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1721 GCCATGTTCACCTGCCC 1737
                ||||||| ||| |||||
Db         19 GCCATGTGCACGTGCCC 3


RESULT 1433
ABL95954/c
ID   ABL95954 standard; DNA; 19 BP.
XX
AC   ABL95954;
XX
DT   19-JUN-2002  (first entry)
XX
DE   Probe #31 for assaying nucleic acids.
XX
KW   Probe; polymorphism detection; mutation detection; disease diagnosis;
KW   microbial identification; ss.
XX
OS   Unidentified.
XX
PN   WO200208414-A1.
XX
PD   31-JAN-2002.
XX
PF   27-JUN-2001; 2001WO-IB001147.
XX
PR   27-JUN-2000; 2000JP-00193133.
PR   03-AUG-2000; 2000JP-00236115.
PR   26-SEP-2000; 2000JP-00292483.
XX
PA   (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
PA   (KANK-) KANKYO ENG CO LTD.
XX
PI   Kurane R,  Kanagawa T,  Kamagata Y,  Torimura M,  Kurata S,  Yamada K;
PI   Yokomaku T;
XX
DR   WPI; 2002-195876/25.
XX
PT   Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
PT   their polymorphism and mutation, particularly useful in science and
PT   medicine for e.g. analytical applications, disease diagnosis and
PT   microbial identification.
XX
PS   Example 41; Page 103; 152pp; Japanese.
XX
CC   The present invention relates to nucleic acid probes, which are useful
CC   for assaying nucleic acids by hybridising with a target nucleic acid, in
CC   which a single-stranded oligonucleotide is labelled with a fluorescent
CC   substance and a quencher in a manner that the fluorescence intensity of
CC   the hybridisation reaction system is increased after completion of the
CC   hybridisation but no stem loop structure is formed. The probes are useful
CC   for assaying nucleic acids and their polymorphism and mutation,
CC   particularly useful for e.g. analytical applications, disease diagnosis
CC   and microbial identification. The present sequence was used to illustrate
CC   the invention
XX
SQ   Sequence 19 BP; 5 A; 5 C; 7 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1721 GCCATGTTCACCTGCCC 1737
                ||||||| ||| |||||
Db         19 GCCATGTGCACGTGCCC 3


RESULT 1434
ABL95969/c
ID   ABL95969 standard; DNA; 19 BP.
XX
AC   ABL95969;
XX
DT   19-JUN-2002  (first entry)
XX
DE   Probe #44 for assaying nucleic acids.
XX
KW   Probe; polymorphism detection; mutation detection; disease diagnosis;
KW   microbial identification; ss.
XX
OS   Unidentified.
XX
PN   WO200208414-A1.
XX
PD   31-JAN-2002.
XX
PF   27-JUN-2001; 2001WO-IB001147.
XX
PR   27-JUN-2000; 2000JP-00193133.
PR   03-AUG-2000; 2000JP-00236115.
```

PR 26-SEP-2000; 2000JP-00292483.
XX
PA (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
PA (KANK-) KANKYO ENG CO LTD.
XX
PI Kurane R, Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;
PI Yokomaku T;
XX
DR WPI; 2002-195876/25.
XX
PT Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
PT their polymorphism and mutation, particularly useful in science and
PT medicine for e.g. analytical applications, disease diagnosis and
PT microbial identification.
XX
PS Example 42; Page 108; 152pp; Japanese.
XX
CC The present invention relates to nucleic acid probes, which are useful
CC for assaying nucleic acids by hybridising with a target nucleic acid, in
CC which a single-stranded oligonucleotide is labelled with a fluorescent
CC substance and a quencher in a manner that the fluorescence intensity of
CC the hybridisation reaction system is increased after completion of the
CC hybridisation but no stem loop structure is formed. The probes are useful
CC for assaying nucleic acids and their polymorphism and mutation,
CC particularly useful for e.g. analytical applications, disease diagnosis
CC and microbial identification. The present sequence was used to illustrate
CC the invention
XX
SQ Sequence 19 BP; 5 A; 5 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1721 GCCATGTTCACCTGCCC 1737
              ||||||| ||| |||||
Db         19 GCCATGTGCACGTGCCC 3
```

RESULT 1435
ABL95961
ID ABL95961 standard; DNA; 19 BP.
XX
AC ABL95961;
XX
DT 19-JUN-2002 (first entry)
XX
DE Probe #38 for assaying nucleic acids.
XX
KW Probe; polymorphism detection; mutation detection; disease diagnosis;
KW microbial identification; ss.
XX
OS Unidentified.
XX
PN WO200208414-A1.
XX
PD 31-JAN-2002.
XX
PF 27-JUN-2001; 2001WO-IB001147.
XX
PR 27-JUN-2000; 2000JP-00193133.
PR 03-AUG-2000; 2000JP-00236115.
PR 26-SEP-2000; 2000JP-00292483.
XX
PA (NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
PA (KANK-) KANKYO ENG CO LTD.
XX
PI Kurane R, Kanagawa T, Kamagata Y, Torimura M, Kurata S, Yamada K;
PI Yokomaku T;
XX
DR WPI; 2002-195876/25.
XX
PT Fluorescently-labeled nucleic acid probes for assaying nucleic acids and
PT their polymorphism and mutation, particularly useful in science and
PT medicine for e.g. analytical applications, disease diagnosis and
PT microbial identification.
XX
PS Example 41; Page 103; 152pp; Japanese.
XX
CC The present invention relates to nucleic acid probes, which are useful
CC for assaying nucleic acids by hybridising with a target nucleic acid, in
CC which a single-stranded oligonucleotide is labelled with a fluorescent
CC substance and a quencher in a manner that the fluorescence intensity of
CC the hybridisation reaction system is increased after completion of the
CC hybridisation but no stem loop structure is formed. The probes are useful
CC for assaying nucleic acids and their polymorphism and mutation,
CC particularly useful for e.g. analytical applications, disease diagnosis
CC and microbial identification. The present sequence was used to illustrate
CC the invention
XX
SQ Sequence 19 BP; 2 A; 7 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1721 GCCATGTTCACCTGCCC 1737
              ||||||| ||| |||||
Db          1 GCCATGTGCACGTGCCC 17
```

RESULT 1436
ACF62642
ID ACF62642 standard; DNA; 19 BP.
XX
AC ACF62642;
XX
DT 08-OCT-2003 (first entry)
XX
DE Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:471.
XX
KW Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;
KW cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;
KW cytostatic; PCR primer; ss.
XX
OS Synthetic.
XX
PN WO2003013534-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008219.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-268144/26.
XX
PT New use of irinotecan for preparation of compositions for treating cancer
PT in subject having genome with variant allele comprising cytochrome p450,
PT subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
XX
PS Disclosure; Page 44; 86pp; English.
XX
CC The present invention describes the use of irinotecan (I) or its
CC derivative for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject having a genome with a variant
CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine
CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have
CC cytostatic activity. The therapeutic applications of (I) is improved,
CC since it is possible to individually treat a subject with an appropriate

```
CC   dosage and/or an appropriate derivative of (I). Therefore, undesirable,
CC   harmful or toxic effects are efficiently avoided. Unnecessary and
CC   potentially harmful treatment of those subjects who do not respond to the
CC   treatment with substances (nonresponders), as well as the development of
CC   drug resistances due to suboptimal drug dosing can be avoided. ACF62200
CC   to ACF62751 and ABM34912 to ABM35013 represent sequences used in the
CC   exemplification of the present invention
XX
SQ   Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   78.9%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        388 TCCTCGGATGAGGTGCAGT 406
              ||||| || :| |||||||
Db          1 TCCTCTGAGRATGTGCAGT 19


RESULT 1437
ACF62643/c
ID   ACF62643 standard; DNA; 19 BP.
XX
AC   ACF62643;
XX
DT   08-OCT-2003  (first entry)
XX
DE   Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:472.
XX
KW   Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;
KW   cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;
KW   cytostatic; PCR primer; ss.
XX
OS   Synthetic.
XX
PN   WO2003013534-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008219.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-268144/26.
XX
PT   New use of irinotecan for preparation of compositions for treating cancer
PT   in subject having genome with variant allele comprising cytochrome p450,
PT   subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
XX
PS   Disclosure; Page 44; 86pp; English.
XX
CC   The present invention describes the use of irinotecan (I) or its
CC   derivative for the preparation of a pharmaceutical composition for
CC   treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC   cancer, or malignant glioma in a subject having a genome with a variant
CC   allele which comprises a cytochrome p450, subfamily IIIA (nifedipine
CC   oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have
CC   cytostatic activity. The therapeutic applications of (I) is improved,
CC   since it is possible to individually treat a subject with an appropriate
CC   dosage and/or an appropriate derivative of (I). Therefore, undesirable,
CC   harmful or toxic effects are efficiently avoided. Unnecessary and
CC   potentially harmful treatment of those subjects who do not respond to the
CC   treatment with substances (nonresponders), as well as the development of
CC   drug resistances due to suboptimal drug dosing can be avoided. ACF62200
CC   to ACF62751 and ABM34912 to ABM35013 represent sequences used in the
CC   exemplification of the present invention
XX
SQ   Sequence 19 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   78.9%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        388 TCCTCGGATGAGGTGCAGT 406
              ||||| || :| |||||||
Db         19 TCCTCTGAGRATGTGCAGT 1


RESULT 1438
ADB21313
ID   ADB21313 standard; DNA; 19 BP.
XX
AC   ADB21313;
XX
DT   20-NOV-2003  (first entry)
XX
DE   MRP1 based cancer related nucleic acid SEQ ID NO:471.
XX
KW   irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW   lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW   variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
KW   ds.
XX
OS   Unidentified.
XX
PN   WO2003013533-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008200.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-354397/33.
XX
PT   Use of irinotecan or its derivative for preparation of a pharmaceutical
PT   composition for treating cancer in a subject having a genome with a
PT   variant allele comprising a multidrug resistance protein 1
PT   polynucleotide.
XX
PS   Disclosure; Page 54; 100pp; English.
XX
CC   The present invention describes a method for the use of irinotecan (I) or
CC   its derivative for the preparation of a pharmaceutical composition for
CC   treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC   cancer, or malignant glioma in a subject having a genome with a variant
CC   allele which comprises a multidrug resistance protein 1 (MRP1)
CC   polynucleotide (II). (I) has cytostatic activity. (I) or its derivative
CC   can be used for the preparation of a pharmaceutical composition for
CC   treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC   cancer, or malignant glioma in a subject, where the subject is a human
CC   (preferably African or Asian) or a mouse. The present sequence represents
CC   a sequence which is used in the exemplification of the present invention.
XX
SQ   Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   78.9%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        388 TCCTCGGATGAGGTGCAGT 406
              ||||| || :| |||||||
Db          1 TCCTCTGAGRATGTGCAGT 19


RESULT 1439
```

```
ADB21314/c
ID   ADB21314 standard; DNA; 19 BP.
XX
AC   ADB21314;
XX
DT   20-NOV-2003  (first entry)
XX
DE   MRP1 based cancer related nucleic acid SEQ ID NO:472.
XX
KW   irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW   lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW   variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
KW   ds.
XX
OS   Unidentified.
XX
PN   WO2003013533-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008200.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-354397/33.
XX
PT   Use of irinotecan or its derivative for preparation of a pharmaceutical
PT   composition for treating cancer in a subject having a genome with a
PT   variant allele comprising a multidrug resistance protein 1
PT   polynucleotide.
XX
PS   Disclosure; Page 54; 100pp; English.
XX
CC   The present invention describes a method for the use of irinotecan (I) or
CC   its derivative for the preparation of a pharmaceutical composition for
CC   treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC   cancer, or malignant glioma in a subject having a genome with a variant
CC   allele which comprises a multidrug resistance protein 1 (MRP1)
CC   polynucleotide (II). (I) has cytostatic activity. (I) or its derivative
CC   can be used for the preparation of a pharmaceutical composition for
CC   treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC   cancer, or malignant glioma in a subject, where the subject is a human
CC   (preferably African or Asian) or a mouse. The present sequence represents
CC   a sequence which is used in the exemplification of the present invention.
XX
SQ   Sequence 19 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   78.9%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        388 TCCTCGGATGAGGTGCAGT 406
              ||||| || :| |||||||
Db         19 TCCTCTGAGRATGTGCAGT 1


RESULT 1440
ADB88402
ID   ADB88402 standard; DNA; 19 BP.
XX
AC   ADB88402;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human UGT1A1 variant allele sequence fragment SEQ ID NO:443.
XX
KW   ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
KW   colorectal cancer; cervical cancer; gastric cancer; lung cancer;
KW   ovarian cancer; pancreatic cancer; malignant glioma;
KW   uridine diphosphate glycosyltransferase1 member A1.
XX
OS   Homo sapiens.
XX
PN   WO2003013536-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008217.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-289896/28.
XX
PT   Use of irinotecan to treat cancer patient by determining if patient has
PT   variant alleles of UGT1A1 gene, administering increased/decreased amounts
PT   of irinotecan based on increased/decreased levels of UGT1A1 gene product.
XX
PS   Disclosure; Page 58; 107pp; English.
XX
CC   The invention relates to the novel use of irinotecan to treat a patient
CC   suffering from cancer. This involves determining if the patient has one
CC   or more variant alleles of the UGT1A1 gene, and if the patient has one or
CC   more of such variant alleles, irinotecan is administered in an increased
CC   or decreased amount in comparison to the amount that is administered
CC   without regard to the patient's alleles in the UGT1A1 gene. The invention
CC   has cytostatic activity. A composition of the invention acts as a
CC   topoisomerase I inhibitor. The method is useful for treating a patient,
CC   an animal e.g. mouse or a human, preferably African or Asian, suffering
CC   from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,
CC   pancreatic cancer or malignant glioma. The present sequence is udes in
CC   the exemplification of the invention.
XX
SQ   Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   78.9%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        388 TCCTCGGATGAGGTGCAGT 406
              ||||| || :| |||||||
Db          1 TCCTCTGAGRATGTGCAGT 19


RESULT 1441
ADB88403/c
ID   ADB88403 standard; DNA; 19 BP.
XX
AC   ADB88403;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human UGT1A1 variant allele sequence fragment SEQ ID NO:444.
XX
KW   ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
KW   colorectal cancer; cervical cancer; gastric cancer; lung cancer;
KW   ovarian cancer; pancreatic cancer; malignant glioma;
KW   uridine diphosphate glycosyltransferase1 member A1.
XX
OS   Homo sapiens.
XX
PN   WO2003013536-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008217.
XX
```

PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-289896/28.
XX
PT Use of irinotecan to treat cancer patient by determining if patient has
PT variant alleles of UGT1A1 gene, administering increased/decreased amounts
PT of irinotecan based on increased/decreased levels of UGT1A1 gene product.
XX
PS Disclosure; Page 58; 107pp; English.
XX
CC The invention relates to the novel use of irinotecan to treat a patient
CC suffering from cancer. This involves determining if the patient has one
CC or more variant alleles of the UGT1A1 gene, and if the patient has one or
CC more of such variant alleles, irinotecan is administered in an increased
CC or decreased amount in comparison to the amount that is administered
CC without regard to the patient's alleles in the UGT1A1 gene. The invention
CC has cytostatic activity. A composition of the invention acts as a
CC topoisomerase I inhibitor. The method is useful for treating a patient,
CC an animal e.g. mouse or a human, preferably African or Asian, suffering
CC from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,
CC pancreatic cancer or malignant glioma. The present sequence is udes in
CC the exemplification of the invention.
XX
SQ Sequence 19 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 9.8e+02;
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 388 TCCTCGGATGAGGTGCAGT 406
||||| || :| |||||||
Db 19 TCCTCTGAGRATGTGCAGT 1

RESULT 1442
ADB97385
ID ADB97385 standard; DNA; 19 BP.
XX
AC ADB97385;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human MDR1 variant allele sequence fragment SEQ ID NO:471.
XX
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;
KW TOP1.
XX
OS Homo sapiens.
XX
PN WO2003013537-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008218.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-268145/26.
XX
PT New use of irinotecan for preparation of pharmaceutical compositions for
PT treating cancer in subject having genome with variant allele comprising
PT multidrug resistance 1 polynucleotide.
XX
PS Disclosure; Page 82; 130pp; English.
XX
CC The invention relates to the novel use of irinotecan or its derivative
CC for the preparation of pharmaceutical compositions for treating
CC colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or
CC malignant glioma in a subject having a genome with a variant allele which
CC comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition
CC of the invention has cytostatic activity. The invention is useful for the
CC preparation of pharmaceutical compositions for treating colorectal,
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC glioma in a subject (preferably human, more preferably African or Asian)
CC or a mouse. The present sequence is used in the exemplification of the
CC invention.
XX
SQ Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 78.9%; Pred. No. 9.8e+02;
Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 388 TCCTCGGATGAGGTGCAGT 406
||||| || :| |||||||
Db 1 TCCTCTGAGRATGTGCAGT 19

RESULT 1443
ADB97386/c
ID ADB97386 standard; DNA; 19 BP.
XX
AC ADB97386;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human MDR1 variant allele sequence fragment SEQ ID NO:472.
XX
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;
KW TOP1.
XX
OS Homo sapiens.
XX
PN WO2003013537-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008218.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-268145/26.
XX
PT New use of irinotecan for preparation of pharmaceutical compositions for
PT treating cancer in subject having genome with variant allele comprising
PT multidrug resistance 1 polynucleotide.
XX
PS Disclosure; Page 82; 130pp; English.
XX
CC The invention relates to the novel use of irinotecan or its derivative
CC for the preparation of pharmaceutical compositions for treating
CC colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or
CC malignant glioma in a subject having a genome with a variant allele which
CC comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition
CC of the invention has cytostatic activity. The invention is useful for the
CC preparation of pharmaceutical compositions for treating colorectal,
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant

```
CC   glioma in a subject (preferably human, more preferably African or Asian)
CC   or a mouse. The present sequence is used in the exemplification of the
CC   invention.
XX
SQ   Sequence 19 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   78.9%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        388 TCCTCGGATGAGGTGCAGT 406
              ||||| || :| |||||||
Db         19 TCCTCTGAGRATGTGCAGT 1


RESULT 1444
ADB92576
ID   ADB92576 standard; DNA; 19 BP.
XX
AC   ADB92576;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human MDR1 variant allele sequence fragment SEQ ID NO:471.
XX
KW   irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW   lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW   multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.
XX
OS   Homo sapiens.
XX
PN   WO2003013535-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008220.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-342400/32.
XX
PT   New use of irinotecan for preparation of pharmaceutical compositions for
PT   treating cancer in subject having genome with variant allele comprising
PT   multidrug resistance 1 polynucleotide.
XX
PS   Disclosure; Page 54; 104pp; English.
XX
CC   The invention relates ro a novel use of irinotecan or its derivative for
CC   the preparation of a pharmaceutical composition for treating colorectal,
CC   cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC   glioma in a subject having a genome with a variant allele which comprises
CC   a multidrug resistance 1 (MDR1) polynucleotide. A composition of the
CC   invention has cytostatic activity. The present sequence is used in the
CC   exemplification of the invention.
XX
SQ   Sequence 19 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   78.9%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        388 TCCTCGGATGAGGTGCAGT 406
              ||||| || :| |||||||
Db          1 TCCTCTGAGRATGTGCAGT 19


RESULT 1445
ADB92577/c
ID   ADB92577 standard; DNA; 19 BP.
XX
AC   ADB92577;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human MDR1 variant allele sequence fragment SEQ ID NO:472.
XX
KW   irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW   lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW   multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.
XX
OS   Homo sapiens.
XX
PN   WO2003013535-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008220.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-342400/32.
XX
PT   New use of irinotecan for preparation of pharmaceutical compositions for
PT   treating cancer in subject having genome with variant allele comprising
PT   multidrug resistance 1 polynucleotide.
XX
PS   Disclosure; Page 54; 104pp; English.
XX
CC   The invention relates ro a novel use of irinotecan or its derivative for
CC   the preparation of a pharmaceutical composition for treating colorectal,
CC   cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC   glioma in a subject having a genome with a variant allele which comprises
CC   a multidrug resistance 1 (MDR1) polynucleotide. A composition of the
CC   invention has cytostatic activity. The present sequence is used in the
CC   exemplification of the invention.
XX
SQ   Sequence 19 BP; 6 A; 5 C; 4 G; 3 T; 0 U; 1 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   78.9%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    1;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        388 TCCTCGGATGAGGTGCAGT 406
              ||||| || :| |||||||
Db         19 TCCTCTGAGRATGTGCAGT 1


RESULT 1446
ADD89803/c
ID   ADD89803 standard; DNA; 19 BP.
XX
AC   ADD89803;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Hamster high mobility group, HMG-I(Y), RT-PCR primer.
XX
KW   Hamster; high mobility group; HMG-I(Y); ss; primer;
KW   expression augmenting sequence element; EASE; RT-PCR;
KW   reverse transcriptase PCR; PCR.
XX
OS   Cricetulus griseus.
XX
PN   US2003008345-A1.
XX
PD   09-JAN-2003.
```

XX
PF 09-OCT-2001; 2001US-00973928.
XX
PR 11-JAN-1996; 96US-00586509.
PR 13-JAN-1997; 97US-00785150.
PR 05-NOV-1999; 99US-00435377.
PR 02-MAR-2000; 2000US-0186537P.
PR 12-SEP-2000; 2000US-00660299.
XX
PA (MORR/) MORRIS A E.
PA (THOM/) THOMAS J N.
XX
PI Morris AE, Thomas JN;
XX
DR WPI; 2003-863362/80.
XX
PT New isolated polynucleotide used for producing recombinant protein by
PT culturing mammalian host cell.
XX
PS Example 16; Page 13; 27pp; English.
XX
CC The invention relates to an isolated polynucleotide comprising a nucleic
CC acid molecule comprising nucleotides 11538-11692, nucleotides 11538-
CC 11760, nucleotides 11673-12165, nucleotides 11813-12165 or nucleotides
CC 11899-12165 of ADD89798, the hamster high mobility group, HMG-I(Y) gene,
CC fragments of the DNA having expression augmenting activity (an expression
CC augmenting sequence element, EASE) or their combinations or complementary
CC DNA. Also included are a mammalian host cell which comprises the
CC polynucleotide, and production of a recombinant protein which comprises
CC culturing the cell under conditions promoting expression of the protein.
CC The polynucleotides are used for production of recombinant protein,
CC particularly in eukaryotic cells for research and therapeutic
CC applications. The method is also used for identifying expression
CC augmenting sequence elements e.g. from other transformed cell lines. High
CC expression of recombinant proteins is facilitated in a short period. The
CC present sequence is a reverse transcriptase (RT)-PCR primer used to
CC isolate the hamster HMG-I(Y) cDNA.
XX
SQ Sequence 19 BP; 2 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 390 CTCGGATGAGGTGCAGT 406
||||||:||||:|||||
Db 19 CTCGGAGGAGGAGCAGT 3

RESULT 1447
ADE27518
ID ADE27518 standard; RNA; 19 BP.
XX
AC ADE27518;
XX
DT 29-JAN-2004 (first entry)
XX
DE Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:462.
XX
KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
KW stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
KW atherosclerosis; cancer; viral infection; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX
OS Synthetic.
XX
PN WO2003070885-A2.
XX
PD 28-AUG-2003.
XX
PF 13-FEB-2003; 2003WO-US004317.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 20-SEP-2002; 2002US-0412304P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Thompson J;
XX
DR WPI; 2003-721687/68.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of obesity or diabetes, downregulates expression of the
PT stearoyl-CoA desaturase gene.
XX
PS Example 3; SEQ ID NO 462; 139pp; English.
XX
CC The present invention describes a short interfering nucleic acid (siNA)
CC that downregulates expression of the SCD (stearoyl-CoA desaturase) gene
CC by RNA interference. Also described: (1) modulating expression of SCD
CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
CC virucide activities. The siNAs can be used to modulate expression of SCD
CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
CC They can also be used for drug screening; diagnosis; target
CC identification and validation; genetic engineering; pharmacogenomics;
CC studying gene function and gene mapping (e.g. of single-nucleotide
CC polymorphisms). The present sequence represents an SCD siNA, which is
CC used in the exemplification of the present invention.
XX
SQ Sequence 19 BP; 5 A; 3 C; 8 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 76.5%; Pred. No. 9.8e+02;
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1085 AGGTGGTGACACTGTGG 1101
|||:|| |||||:| ||
Db 2 AGGUGGAGACACUGCGG 18

RESULT 1448
ADE27228/c
ID ADE27228 standard; RNA; 19 BP.
XX
AC ADE27228;
XX
DT 29-JAN-2004 (first entry)
XX
DE Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:172.
XX
KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
KW stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
KW atherosclerosis; cancer; viral infection; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
XX
OS Synthetic.
XX
PN WO2003070885-A2.
XX
PD 28-AUG-2003.
XX
PF 13-FEB-2003; 2003WO-US004317.
XX
PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 20-SEP-2002; 2002US-0412304P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Thompson J;
XX
DR WPI; 2003-721687/68.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of obesity or diabetes, downregulates expression of the
PT stearoyl-CoA desaturase gene.
XX
PS Example 3; SEQ ID NO 172; 139pp; English.
XX
CC The present invention describes a short interfering nucleic acid (siNA)
CC that downregulates expression of the SCD (stearoyl-CoA desaturase) gene
CC by RNA interference. Also described: (1) modulating expression of SCD
CC genes in cells, tissue explants or organisms by introduction of siNA; (2)
CC kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or
CC complexes of siNA; and (4) vectors that express siNA. SCD inhibiting
CC siNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
CC virucide activities. The siNAs can be used to modulate expression of SCD
CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
CC They can also be used for drug screening; diagnosis; target
CC identification and validation; genetic engineering; pharmacogenomics;
CC studying gene function and gene mapping (e.g. of single-nucleotide
CC polymorphisms). The present sequence represents an SCD siNA, which is
CC used in the exemplification of the present invention.
XX
SQ Sequence 19 BP; 3 A; 8 C; 3 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1085 AGGTGGTGACACTGTGG 1101
||||||:|||||||:||
Db 18 AGGTGGAGACACTGCGG 2

RESULT 1449
ADF37256
ID ADF37256 standard; RNA; 19 BP.
XX
AC ADF37256;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human VEGFR3 short interfering nucleic acid (siNA) SEQ ID NO:1545.
XX
KW double-stranded short interfering nucleic acid;
KW short interfering nucleic acid; siNA; downregulation;
KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
KW cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
KW diabetic retinopathy; macular degeneration; neovascular glaucoma;
KW arthritis; psoriasis; endometriosis; angiofibroma;
KW polycystic kidney disease; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003070910-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US005022.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 29-MAY-2002; 2002WO-US017674.
PR 06-JUN-2002; 2002US-0386782P.
PR 03-JUL-2002; 2002US-0393796P.
PR 29-JUL-2002; 2002US-0399348P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 04-NOV-2002; 2002US-00287949.
PR 27-NOV-2002; 2002US-00306747.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Pavco P;
XX
DR WPI; 2003-679876/64.
XX
PT New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of cancer, downregulates the vascular endothelial growth
PT factor receptor gene.
XX
PS Example 3; SEQ ID NO 1545; 207pp; English.
XX
CC The present invention describes a double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the vascular
CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
CC that express siNA; and (5) single-stranded siNA with similar properties.
CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
CC gynaecological activities. The siNA are useful for modulating
CC (downregulating) the expression of VEGFR genes. The siNA are potentially
CC useful for treating a wide range of angiogenesis-associated conditions,
CC particularly cancers, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
CC drug screening, target identification and validation, genetic
CC engineering, studying gene function, and also for gene mapping (e.g. of
CC single-nucleotide polymorphisms). The present sequence is used in the
CC exemplification of the present invention.
XX
SQ Sequence 19 BP; 5 A; 5 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 76.5%; Pred. No. 9.8e+02;
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 517 GAGAAGCTGACCCTCAA 533
|||||||:| ||:|||
Db 1 GAGAAGCUGGUCCUCAA 17

RESULT 1450
ADF37503/c
ID ADF37503 standard; RNA; 19 BP.
XX
AC ADF37503;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human VEGFR3 short interfering nucleic acid (siNA) SEQ ID NO:1792.
XX
KW double-stranded short interfering nucleic acid;
KW short interfering nucleic acid; siNA; downregulation;
KW vascular endothelial growth factor receptor; VEGFR; antiangiogenic;
KW cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic;
KW nephrotropic; gynaecological; angiogenesis-associated condition; cancer;
KW diabetic retinopathy; macular degeneration; neovascular glaucoma;

KW arthritis; psoriasis; endometriosis; angiofibroma;
KW polycystic kidney disease; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO2003070910-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US005022.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 29-MAY-2002; 2002WO-US017674.
PR 06-JUN-2002; 2002US-0386782P.
PR 03-JUL-2002; 2002US-0393796P.
PR 29-JUL-2002; 2002US-0399348P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 04-NOV-2002; 2002US-00287949.
PR 27-NOV-2002; 2002US-00306747.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Pavco P;
XX
DR WPI; 2003-679876/64.
XX
PT New double-stranded interfering nucleic acid, useful e.g. for treatment
PT and diagnosis of cancer, downregulates the vascular endothelial growth
PT factor receptor gene.
XX
PS Example 3; SEQ ID NO 1792; 207pp; English.
XX
CC The present invention describes a double-stranded short interfering
CC nucleic acid (siNA) that downregulates expression of the vascular
CC endothelial growth factor receptor (VEGFR) gene. Also described: (1) a
CC siNA that downregulates the VEGF gene; (2) kits for in vitro or in vivo
CC delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
CC that express siNA; and (5) single-stranded siNA with similar properties.
CC The siNAs have antiangiogenic, cytostatic, antidiabetic,
CC ophthalmological, antiarthritic, antipsoriatic, nephrotropic and
CC gynaecological activities. The siNA are useful for modulating
CC (downregulating) the expression of VEGFR genes. The siNA are potentially
CC useful for treating a wide range of angiogenesis-associated conditions,
CC particularly cancers, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma,
CC and polycystic kidney disease. The siNA may also be useful for diagnosis,
CC drug screening, target identification and validation, genetic
CC engineering, studying gene function, and also for gene mapping (e.g. of
CC single-nucleotide polymorphisms). The present sequence is used in the
CC exemplification of the present invention.
XX
SQ Sequence 19 BP; 4 A; 5 C; 5 G; 0 T; 5 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 517 GAGAAGCTGACCCTCAA 533
||||||||| ||||||
Db 19 GAGAAGCTGGTCCTCAA 3

RESULT 1451
ADF31705
ID ADF31705 standard; RNA; 19 BP.
XX
AC ADF31705;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human IGF-1R siNA lower strand, SEQ ID NO:370.
XX
KW RNA interference; short interfering nucleic acid; siNA;
KW short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW short hairpin RNA; shRNA; expression modulation; gene therapy;
KW drug screening; diagnosis; therapeutic target identification;
KW pharmacogenomics; gene function analysis; gene mapping; cancer;
KW proliferative disease; restenosis; polycystic kidney disease;
KW inflammatory disease; allergic disease; autoimmune disease;
KW transplant rejection; cytostatic; vasotropic; nephrotropic;
KW antiinflammatory; antiallergic; immunosuppressive; human;
KW insulin-like growth factor 1 receptor; IGF-1R; ss.
XX
OS Homo sapiens.
XX
PN WO2003070911-A2.
XX
PD 28-AUG-2003.
XX
PF 20-FEB-2003; 2003WO-US005044.
XX
PR 20-FEB-2002; 2002US-0358580P.
PR 11-MAR-2002; 2002US-0363124P.
PR 06-JUN-2002; 2002US-0386782P.
PR 29-AUG-2002; 2002US-0406784P.
PR 05-SEP-2002; 2002US-0408378P.
PR 09-SEP-2002; 2002US-0409293P.
PR 15-JAN-2003; 2003US-0440129P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J, Beigelman L, Chowrira B;
XX
DR WPI; 2003-721691/68.
XX
PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of cancer , downregulates expression of the insulin-like growth
PT factor-1 receptor gene.
XX
PS Example 3; SEQ ID NO 370; 147pp; English.
XX
CC The invention relates to short interfering nucleic acids (siNA) which
CC downregulate expression of the human insulin-like growth factor 1
CC receptor (IGF-1R) gene by RNA interference. The siNAs may or may not
CC comprise ribonucleotides and may be double or single stranded. They
CC further comprise sense and antisense regions, or alternatively are
CC assembled from a sense oligonucleotide and an antisense oligonucleotide.
CC Specifically, the siNAs include short interfering RNA (siRNA), double-
CC stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
CC can be unmodified or chemically modified, can contain
CC deoxyribonucleotides, and can be chemically synthesised, expressed from a
CC vector or enzymatically synthesised. The invention also relates to kits
CC for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
CC of siNA; and vectors that express siNA. The siNAs are used to modulate
CC expression of the IGF-1R gene in cells, tissue explants or organisms
CC (e.g., by ex vivo gene therapy), or in grafts and transplants for the
CC treatment of a variety of conditions. They may be used for treating
CC cancer and other proliferative diseases (e.g., restenosis and polycystic
CC kidney disease), inflammatory and/or allergic diseases, autoimmune
CC diseases and transplant rejection. . The siNAs are also useful for drug
CC screening, diagnosis, therapeutic target identification and validation,
CC genetic engineering, pharmacogenomics, studying gene function, and gene
CC mapping (e.g., of single nucleotide polymorphisms). The present sequence
CC represents the lower strand of a human IGF-1R-targeted double-stranded
CC siNA.
XX
SQ Sequence 19 BP; 4 A; 8 C; 4 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 76.5%; Pred. No. 9.8e+02;
Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1283 CAGGCATCCTGTCCAAC 1299
              ||||||:||:| ||| |
Db          2 CAGGCAUCCUGCCCAUC 18
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RESULT 1452
ADF31428/c
ID   ADF31428 standard; RNA; 19 BP.
XX
AC   ADF31428;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Human IGF-1R transcript target sequence/siNA upper strand, SEQ ID NO:93.
XX
KW   RNA interference; short interfering nucleic acid; siNA;
KW   short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW   short hairpin RNA; shRNA; expression modulation; gene therapy;
KW   drug screening; diagnosis; therapeutic target identification;
KW   pharmacogenomics; gene function analysis; gene mapping; cancer;
KW   proliferative disease; restenosis; polycystic kidney disease;
KW   inflammatory disease; allergic disease; autoimmune disease;
KW   transplant rejection; cytostatic; vasotropic; nephrotropic;
KW   antiinflammatory; antiallergic; immunosuppressive; human;
KW   insulin-like growth factor 1 receptor; IGF-1R; target sequence; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003070911-A2.
XX
PD   28-AUG-2003.
XX
PF   20-FEB-2003; 2003WO-US005044.
XX
PR   20-FEB-2002; 2002US-0358580P.
PR   11-MAR-2002; 2002US-0363124P.
PR   06-JUN-2002; 2002US-0386782P.
PR   29-AUG-2002; 2002US-0406784P.
PR   05-SEP-2002; 2002US-0408378P.
PR   09-SEP-2002; 2002US-0409293P.
PR   15-JAN-2003; 2003US-0440129P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J,  Beigelman L,  Chowrira B;
XX
DR   WPI; 2003-721691/68.
XX
PT   New short interfering nucleic acid, useful e.g. for treatment and
PT   diagnosis of cancer , downregulates expression of the insulin-like growth
PT   factor-1 receptor gene.
XX
PS   Example 3; SEQ ID NO 93; 147pp; English.
XX
CC   The invention relates to short interfering nucleic acids (siNA) which
CC   downregulate expression of the human insulin-like growth factor 1
CC   receptor (IGF-1R) gene by RNA interference. The siNAs may or may not
CC   comprise ribonucleotides and may be double or single stranded. They
CC   further comprise sense and antisense regions, or alternatively are
CC   assembled from a sense oligonucleotide and an antisense oligonucleotide.
CC   Specifically, the siNAs include short interfering RNA (siRNA), double-
CC   stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs
CC   can be unmodified or chemically modified, can contain
CC   deoxyribonucleotides, and can be chemically synthesised, expressed from a
CC   vector or enzymatically synthesised. The invention also relates to kits
CC   for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
CC   of siNA; and vectors that express siNA. The siNAs are used to modulate
CC   expression of the IGF-1R gene in cells, tissue explants or organisms
CC   (e.g., by ex vivo gene therapy), or in grafts and transplants for the
CC   treatment of a variety of conditions. They may be used for treating
CC   cancer and other proliferative diseases (e.g., restenosis and polycystic
CC   kidney disease), inflammatory and/or allergic diseases, autoimmune
CC   diseases and transplant rejection. . The siNAs are also useful for drug
CC   screening, diagnosis, therapeutic target identification and validation,
CC   genetic engineering, pharmacogenomics, studying gene function, and gene
CC   mapping (e.g., of single nucleotide polymorphisms). The present sequence
CC   represents the upper strand of a human IGF-1R-targeted double-stranded
CC   siNA, which is identical to the IGF-1R transcript target sequence.
XX
SQ   Sequence 19 BP; 3 A; 4 C; 8 G; 0 T; 4 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1283 CAGGCATCCTGTCCAAC 1299
              |||||||||| ||| |
Db         18 CAGGCATCCTGCCCATC 2
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RESULT 1453
ADF13396
ID   ADF13396 standard; DNA; 19 BP.
XX
AC   ADF13396;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Apolipoprotein C-III, BaySNP 1837, PCR primer #2.
XX
KW   Cardiant; antiarteriosclerotic; vasotropic; cerebroprotective;
KW   hypotensive; gene therapy; human; apolipoprotein C-III; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003072813-A2.
XX
PD   04-SEP-2003.
XX
PF   14-FEB-2003; 2003WO-EP001514.
XX
PR   27-FEB-2002; 2002EP-00004258.
XX
PA   (FARB ) BAYER AG.
XX
PI   Stropp U,  Schwers S,  Kallabis H;
XX
DR   WPI; 2003-712738/67.
XX
PT   New isolated polynucleotide encoded by a phenotype-associated gene,
PT   useful for prognosticating statin therapy response, and diagnosing or
PT   treating cardiovascular diseases, such as hypertension, myocardial
PT   infarction and stroke.
XX
PS   Example 1; Page 67; 182pp; English.
XX
CC   The present invention relates to human phenotype-associated (PA) genes (I
CC   ; ADF13307-ADF13386) which contain a Single Nucleotide Polymorphism
CC   (SNP). The SNP is given in the sequence as a variant nucleotide. Also
CC   claimed are methods for screening for agents which regulate the activity
CC   of a PA gene and reagents that modulate the activity of a PA polypeptide
CC   or a polynucleotide where the reagent is identified by the screening
CC   methods. The methods and compositions of the present invention are useful
CC   for prognosticating, diagnosing and treating cardiovascular diseases,
CC   such as atherosclerosis, hypertension, restenosis, arterial inflammation,
CC   myocardial infarction and stroke. The present sequence is a PCR primer,
CC   used in the examples from the invention.
XX
SQ   Sequence 19 BP; 2 A; 10 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        306 CCCACTCAGCTCTGCAC 322
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                 |||||||||| |||| |
Db          1 CCCACTCAGCCCTGCTC 17


RESULT 1454
ADF84627/c
ID   ADF84627 standard; RNA; 19 BP.
XX
AC   ADF84627;
XX
DT   26-FEB-2004  (first entry)
XX
DE   Human ABL1-targeted siRNA - SEQ ID 921.
XX
KW   short interfering nucleic acid; siNA; breakpoint cluster region;
KW   v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KW   cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
XX
OS   Homo sapiens.
XX
PN   WO2003070972-A2.
XX
PD   28-AUG-2003.
XX
PF   20-FEB-2003; 2003WO-US005234.
XX
PR   20-FEB-2002; 2002US-0358580P.
PR   11-MAR-2002; 2002US-0363124P.
PR   06-JUN-2002; 2002US-0386782P.
PR   15-AUG-2002; 2002US-0404039P.
PR   29-AUG-2002; 2002US-0406784P.
PR   05-SEP-2002; 2002US-0408378P.
PR   09-SEP-2002; 2002US-0409293P.
PR   14-JAN-2003; 2003US-0439922P.
PR   15-JAN-2003; 2003US-0440129P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J,  Beigelman L,  Chowrira B;
XX
DR   WPI; 2003-679889/64.
XX
PT   New double-stranded interfering nucleic acid, useful e.g. for treatment
PT   and diagnosis of leukemia and lymphoma, downregulates the breakpoint
PT   cluster region-Abelson (BCR-ABL) gene.
XX
PS   Example 7; SEQ ID NO 921; 197pp; English.
XX
CC   The invention relates to a novel double-stranded short interfering
CC   nucleic acid (siNA) that downregulates expression of the breakpoint
CC   cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
CC   (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
CC   activity and may be useful for modulating expression of the BCR-ABL gene,
CC   as well as for treating leukaemia or lymphoma and in diagnosis, drug
CC   screening, target identification and validation, genetic engineering,
CC   gene function studies and gene mapping. The current sequence is that of
CC   the human ABL1-targeted siRNA of the invention.
XX
SQ   Sequence 19 BP; 1 A; 8 C; 4 G; 0 T; 6 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        953 GCCACCGGCAGAAGGTG 969
              || |||||||| |||||
Db         19 GCAACCGGCAGGAGGTG 3


RESULT 1455
ADF84791
ID   ADF84791 standard; RNA; 19 BP.
XX
AC   ADF84791;
XX
DT   26-FEB-2004  (first entry)
XX
DE   Human ABL1-targeted siRNA - SEQ ID 1085.
XX
KW   short interfering nucleic acid; siNA; breakpoint cluster region;
KW   v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KW   cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
XX
OS   Homo sapiens.
XX
PN   WO2003070972-A2.
XX
PD   28-AUG-2003.
XX
PF   20-FEB-2003; 2003WO-US005234.
XX
PR   20-FEB-2002; 2002US-0358580P.
PR   11-MAR-2002; 2002US-0363124P.
PR   06-JUN-2002; 2002US-0386782P.
PR   15-AUG-2002; 2002US-0404039P.
PR   29-AUG-2002; 2002US-0406784P.
PR   05-SEP-2002; 2002US-0408378P.
PR   09-SEP-2002; 2002US-0409293P.
PR   14-JAN-2003; 2003US-0439922P.
PR   15-JAN-2003; 2003US-0440129P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J,  Beigelman L,  Chowrira B;
XX
DR   WPI; 2003-679889/64.
XX
PT   New double-stranded interfering nucleic acid, useful e.g. for treatment
PT   and diagnosis of leukemia and lymphoma, downregulates the breakpoint
PT   cluster region-Abelson (BCR-ABL) gene.
XX
PS   Example 7; SEQ ID NO 1085; 197pp; English.
XX
CC   The invention relates to a novel double-stranded short interfering
CC   nucleic acid (siNA) that downregulates expression of the breakpoint
CC   cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
CC   (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
CC   activity and may be useful for modulating expression of the BCR-ABL gene,
CC   as well as for treating leukaemia or lymphoma and in diagnosis, drug
CC   screening, target identification and validation, genetic engineering,
CC   gene function studies and gene mapping. The current sequence is that of
CC   the human ABL1-targeted siRNA of the invention.
XX
SQ   Sequence 19 BP; 5 A; 5 C; 8 G; 0 T; 1 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   82.4%;  Pred. No. 9.8e+02;
  Matches   14;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        361 GGGGAGAGTGACCAGGC 377
              ||| |||| :|||||| |
Db          2 GGGCAGAGUGACCAGCC 18


RESULT 1456
ADF84308
ID   ADF84308 standard; RNA; 19 BP.
XX
AC   ADF84308;
XX
DT   26-FEB-2004  (first entry)
XX
DE   Human ABL1-targeted siRNA - SEQ ID 602.
XX
KW   short interfering nucleic acid; siNA; breakpoint cluster region;
KW   v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
```

```
KW   cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
XX
OS   Homo sapiens.
XX
PN   WO2003070972-A2.
XX
PD   28-AUG-2003.
XX
PF   20-FEB-2003; 2003WO-US005234.
XX
PR   20-FEB-2002; 2002US-0358580P.
PR   11-MAR-2002; 2002US-0363124P.
PR   06-JUN-2002; 2002US-0386782P.
PR   15-AUG-2002; 2002US-0404039P.
PR   29-AUG-2002; 2002US-0406784P.
PR   05-SEP-2002; 2002US-0408378P.
PR   09-SEP-2002; 2002US-0409293P.
PR   14-JAN-2003; 2003US-0439922P.
PR   15-JAN-2003; 2003US-0440129P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J,  Beigelman L,  Chowrira B;
XX
DR   WPI; 2003-679889/64.
XX
PT   New double-stranded interfering nucleic acid, useful e.g. for treatment
PT   and diagnosis of leukemia and lymphoma, downregulates the breakpoint
PT   cluster region-Abelson (BCR-ABL) gene.
XX
PS   Example 7; SEQ ID NO 602; 197pp; English.
XX
CC   The invention relates to a novel double-stranded short interfering
CC   nucleic acid (siNA) that downregulates expression of the breakpoint
CC   cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
CC   (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
CC   activity and may be useful for modulating expression of the BCR-ABL gene,
CC   as well as for treating leukaemia or lymphoma and in diagnosis, drug
CC   screening, target identification and validation, genetic engineering,
CC   gene function studies and gene mapping. The current sequence is that of
CC   the human ABL1-targeted siRNA of the invention.
XX
SQ   Sequence 19 BP; 6 A; 4 C; 8 G; 0 T; 1 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   82.4%;  Pred. No. 9.8e+02;
  Matches   14;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        953 GCCACCGGCAGAAGGTG 969
              || |||||||| |||:|
Db          1 GCAACCGGCAGGAGGUG 17


RESULT 1457
ADF84472/c
ID   ADF84472 standard; RNA; 19 BP.
XX
AC   ADF84472;
XX
DT   26-FEB-2004  (first entry)
XX
DE   Human ABL1-targeted siRNA - SEQ ID 766.
XX
KW   short interfering nucleic acid; siNA; breakpoint cluster region;
KW   v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL;
KW   cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
XX
OS   Homo sapiens.
XX
PN   WO2003070972-A2.
XX
PD   28-AUG-2003.
XX
PF   20-FEB-2003; 2003WO-US005234.
XX
PR   20-FEB-2002; 2002US-0358580P.
PR   11-MAR-2002; 2002US-0363124P.
PR   06-JUN-2002; 2002US-0386782P.
PR   15-AUG-2002; 2002US-0404039P.
PR   29-AUG-2002; 2002US-0406784P.
PR   05-SEP-2002; 2002US-0408378P.
PR   09-SEP-2002; 2002US-0409293P.
PR   14-JAN-2003; 2003US-0439922P.
PR   15-JAN-2003; 2003US-0440129P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J,  Beigelman L,  Chowrira B;
XX
DR   WPI; 2003-679889/64.
XX
PT   New double-stranded interfering nucleic acid, useful e.g. for treatment
PT   and diagnosis of leukemia and lymphoma, downregulates the breakpoint
PT   cluster region-Abelson (BCR-ABL) gene.
XX
PS   Example 7; SEQ ID NO 766; 197pp; English.
XX
CC   The invention relates to a novel double-stranded short interfering
CC   nucleic acid (siNA) that downregulates expression of the breakpoint
CC   cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1
CC   (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic
CC   activity and may be useful for modulating expression of the BCR-ABL gene,
CC   as well as for treating leukaemia or lymphoma and in diagnosis, drug
CC   screening, target identification and validation, genetic engineering,
CC   gene function studies and gene mapping. The current sequence is that of
CC   the human ABL1-targeted siRNA of the invention.
XX
SQ   Sequence 19 BP; 1 A; 8 C; 5 G; 0 T; 5 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        361 GGGGAGAGTGACCAGGC 377
              ||| |||||||||||  |
Db         18 GGGCAGAGTGACCAGCC 2


RESULT 1458
ADM92922
ID   ADM92922 standard; DNA; 19 BP.
XX
AC   ADM92922;
XX
DT   03-JUN-2004  (first entry)
XX
DE   SNP-containing cardiovascular associated gene primer #253.
XX
KW   SNP; single nucleotide polymorphism; cardiovascular associated gene;
KW   allelic variation; atherosclerosis; ischemia; reperfusion; hypertension;
KW   restenosis; arterial inflammation; myocardial infarction; stroke; primer;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO2003057911-A2.
XX
PD   17-JUL-2003.
XX
PF   07-JAN-2003; 2003WO-EP000060.
XX
PR   08-JAN-2002; 2002EP-00000153.
XX
PA   (FARB ) BAYER AG.
XX
PI   Stropp U,  Schwers S,  Kallabis H;
```

XX
DR WPI; 2003-577532/54.
XX
PT New isolated polynucleotides comprising single nucleotide polymorphisms
PT of the cardiovascular gene, useful for assessing predisposition or
PT susceptibility to a cardiovascular disease, e.g. atherosclerosis,
PT restenosis or stroke.
XX
PS Disclosure; Page 77; 187pp; English.
XX
CC The invention relates an isolated polynucleotide (I) encoded by a
CC cardiovascular associated (CA) gene, having allelic variation contained
CC in a functional surrounding like full length cDNA for CA gene
CC polypeptide, and with or without the CA gene promoter sequence. (I) is a
CC polynucleotide comprising single nucleotide polymorphisms predicting
CC cardiovascular disease. The polynucleotides are useful for assessing
CC predisposition or susceptibility to a cardiovascular disease, e.g.
CC atherosclerosis, ischemia/reperfusion, hypertension, restenosis, arterial
CC inflammation, myocardial infarction, and stroke. These may also be used
CC to predict personal medication schemes omitting adverse drug reactions,
CC or as probes for detecting genetic polymorphisms and as templates for the
CC recombinant production of normal or variant peptides/polypeptides encoded
CC by the genes. This sequence corresponds to a PCR primer to amplify one of
CC the genes of the invention.
XX
SQ Sequence 19 BP; 2 A; 10 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 306 CCCACTCAGCTCTGCAC 322
||||||||||| |||| |
Db 1 CCCACTCAGCCCTGCTC 17

RESULT 1459
ADH54705/c
ID ADH54705 standard; DNA; 19 BP.
XX
AC ADH54705;
XX
DT 25-MAR-2004 (first entry)
XX
DE Human VEGF-C PCR primer #2.
XX
KW human; ss; PCR; VEGF-C; cardiovascular disorder; atherosclerosis;
KW diabetic retinopathy; autoimmune disorder; inflammatory disorder;
KW vascular endothelial growth factor; primer.
XX
OS Homo sapiens.
XX
PN US2003232437-A1.
XX
PD 18-DEC-2003.
XX
PF 17-JUN-2002; 2002US-00173718.
XX
PR 17-JUN-2002; 2002US-00173718.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Zhang H, Dobie KW;
XX
DR WPI; 2004-061284/06.
XX
PT New compounds, particularly antisense oligonucleotides targeted to a
PT nucleic acid encoding vascular endothelial growth factor-C (VEGF-C),
PT useful for treating atherosclerosis, diabetic retinopathy, or
PT inflammatory disorders.
XX
PS Example 13; SEQ ID NO 6; 83pp; English.
XX
CC The invention relates to a compound targeted to and which specifically
CC hybridises with a nucleic acid molecule encoding VEGF-C, and inhibits the
CC expression of VEGF-C. The compound, composition and methods are useful
CC for treating a disease or condition associated with VEGF-C, such as a
CC cardiovascular disorder e.g. atherosclerosis or diabetic retinopathy or
CC an autoimmune or inflammatory disorder. They are also useful in research
CC and diagnostics for modulating the expression of VEGF-C. The present
CC sequence represents a human VEGF-C PCR primer.
XX
SQ Sequence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1563 GATGCCTGACTCAGGCA 1579
||||||||| |||||| |
Db 17 GATGCCTGGCTCAGGAA 1

RESULT 1460
AD017050
ID AD017050 standard; DNA; 19 BP.
XX
AC AD017050;
XX
DT 01-JUL-2004 (first entry)
XX
DE Human LIPIN3 exon14 PCR primer seqid 42.
XX
KW LIPIN3; obesity; obesity-related disorder; differential expression;
KW polynucleotide polymorphism; adipocyte; human; PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN US2004018497-A1.
XX
PD 29-JAN-2004.
XX
PF 26-JUL-2002; 2002US-00206618.
XX
PR 26-JUL-2002; 2002US-00206618.
XX
PA (WARD/) WARDEN C H.
XX
PI Warden CH;
XX
DR WPI; 2004-122019/12.
XX
PT Novel isolated LIPIN3 polypeptide, useful for diagnosing diabetes.
XX
PS Example 5; SEQ ID NO 41; 58pp; English.
XX
CC The invention describes an isolated polypeptide (I) comprising a
CC polypeptide having a fully defined LIPIN3 sequence (S1) of 806 amino
CC acids as given in the specification or a region consisting of 5 or more
CC contiguous amino acids, where the region includes amino acid of 634 of
CC (S1). Also described are: an isolated polynucleotide (II) comprising a
CC fully defined sequence (S2) of 2405 base pair as given in the
CC specification, or its complement, a polynucleotide that selectively
CC hybridizes to (S2) relative to a known polynucleotide, or a region of 15
CC or more contiguous nucleotides, the region comprising nucleotide 1904 of
CC (S2); vector, preferably an expression vector (III) comprising (II); a
CC host cell (IV) comprising (II); detecting (M1) differential expression of
CC a LIPIN3 polynucleotide in a test sample; detecting obesity or obesity-
CC related disorders associated with differential expression of a LIPIN3
CC polynucleotide comprising a detecting a level of expression of (V), or
CC (VI), or a region of (V) or (VI), where the region is 10 or more
CC nucleotides in length; screening (M2) for agents that reduce the
CC expression of a (II) in a test cell sample; antibodies that specifically
CC bind to (I); a recombinant cell comprising a recombinantly modified (II),
CC such that the (II) is overexpressed; a composition comprising (I); an
CC array comprising two or more (II); and identifying an alteration in

CC LIPIN3 gene associated with obesity or an obesity related disorder. (II)
CC is useful for detecting a polynucleotide polymorphism associated with
CC obesity. (II) is useful for diagnosing obesity an obesity-related
CC disorder which involves detecting (I). In (M2), the cell is an adipocyte.
CC The test agent is chosen from antibody, protein, nucleic acid, and small
CC organic molecule. This sequence represents a primer used to identify
CC single nucleotide polymorphisms in the human Lipin3 gene that may be
CC associated with obesity.
XX
SQ Sequence 19 BP; 5 A; 9 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1383 CGACCTCCTCACCAAGC 1399
||||| | |||||||||
Db 3 CGACCACTTCACCAAGC 19

RESULT 1461
ADQ60589/c
ID ADQ60589 standard; RNA; 19 BP.
XX
AC ADQ60589;
XX
DT 09-SEP-2004 (first entry)
XX
DE Anti-Firefly luciferase siRNA Luc 78 SEQ ID NO:288.
XX
KW ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
KW RNA interference; firefly; luciferase.
XX
OS Synthetic.
XX
PN WO2004045543-A2.
XX
PD 03-JUN-2004.
XX
PF 14-NOV-2003; 2003WO-US036787.
XX
PR 14-NOV-2002; 2002US-0426137P.
PR 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMACON INC.
XX
PI Anastasia K, Angela R, Devin L, William M, Stephen S;
XX
DR WPI; 2004-420527/39.
XX
PT Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
PT by selecting a target gene and measuring the functionality of the
PT nucleotide sequences that are complementary to a stretch of nucleotides
PT of the target sequence.
XX
PS Example 1; SEQ ID NO 288; 199pp; English.
XX
CC The invention relates to a novel method for selecting siRNA (short
CC interfering RNA) comprising selecting an siRNA molecule of 19-25
CC nucleoside bases by selecting a target gene and measuring the
CC functionality of sequences of 19-25 nucleotides in length that are
CC substantially complementary to a stretch of nucleotides of the target
CC sequence, where the functionality is dependent upon non-target specific
CC criteria. Also claimed are methods for gene-silencing, developing an
CC siRNA algorithm for selecting siRNA, selecting an siRNA with improved
CC functionality, selecting hyperfunctional siRNA, an siRNA molecule
CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
CC sequence consisting of GGGAGAUAGUGAUGAAGUA; GAAGUACAUCCAUUAUAAG;
CC GUACGACAACCGGGAGAUA; AGAUAGUGAUGAAGUACAU; UGAAGACUCUGCUCAGUUU;
CC CAUGCGGCCUCUGUUUGA; UGCGGCCUCUGUUUGAUUU; GAGAUAGUGAUGAAGUACA;
CC GGAGAUAGUGAUGAAGUAC; and GAAGACUCUGCUCAGUUUG. The siRNA molecule
CC comprises a sense strand and an anti-sense strand. The siRNA molecule
CC comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
CC pairs. The kit comprises at least two siRNA, comprising a first optimised
CC siRNA and a second optimised siRNA. The method is useful in selecting
CC siRNA for generating a gene silencing reagent. The present sequence is
CC used in the exemplification of the invention.
XX
SQ Sequence 19 BP; 6 A; 3 C; 7 G; 0 T; 3 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1203 CCTCTTTCCGGGCTCCA 1219
| |||||||| ||||||
Db 19 CGTCTTTCCGTGCTCCA 3

RESULT 1462
ADQ60588/c
ID ADQ60588 standard; RNA; 19 BP.
XX
AC ADQ60588;
XX
DT 09-SEP-2004 (first entry)
XX
DE Anti-Firefly luciferase siRNA Luc 77 SEQ ID NO:287.
XX
KW ss; siRNA; gene silencing; Bcl-2; optimised; short interfering RNA;
KW RNA interference; firefly; luciferase.
XX
OS Synthetic.
XX
PN WO2004045543-A2.
XX
PD 03-JUN-2004.
XX
PF 14-NOV-2003; 2003WO-US036787.
XX
PR 14-NOV-2002; 2002US-0426137P.
PR 10-SEP-2003; 2003US-0502050P.
XX
PA (DHAR-) DHARMACON INC.
XX
PI Anastasia K, Angela R, Devin L, William M, Stephen S;
XX
DR WPI; 2004-420527/39.
XX
PT Selecting siRNA by selecting an siRNA molecule of 19-25 nucleoside bases
PT by selecting a target gene and measuring the functionality of the
PT nucleotide sequences that are complementary to a stretch of nucleotides
PT of the target sequence.
XX
PS Example 1; SEQ ID NO 287; 199pp; English.
XX
CC The invention relates to a novel method for selecting siRNA (short
CC interfering RNA) comprising selecting an siRNA molecule of 19-25
CC nucleoside bases by selecting a target gene and measuring the
CC functionality of sequences of 19-25 nucleotides in length that are
CC substantially complementary to a stretch of nucleotides of the target
CC sequence, where the functionality is dependent upon non-target specific
CC criteria. Also claimed are methods for gene-silencing, developing an
CC siRNA algorithm for selecting siRNA, selecting an siRNA with improved
CC functionality, selecting hyperfunctional siRNA, an siRNA molecule
CC effective at silencing Bcl-2, and a kit for gene silencing comprising the
CC siRNA. The siRNA molecule comprises a sequence substantially similar to a
CC sequence consisting of GGGAGAUAGUGAUGAAGUA; GAAGUACAUCCAUUAUAAG;
CC GUACGACAACCGGGAGAUA; AGAUAGUGAUGAAGUACAU; UGAAGACUCUGCUCAGUUU;
CC CAUGCGGCCUCUGUUUGA; UGCGGCCUCUGUUUGAUUU; GAGAUAGUGAUGAAGUACA;
CC GGAGAUAGUGAUGAAGUAC; and GAAGACUCUGCUCAGUUUG. The siRNA molecule
CC comprises a sense strand and an anti-sense strand. The siRNA molecule
CC comprises a hairpin. The siRNA molecule comprises between 18 and 30 base
CC pairs. The kit comprises at least two siRNA, comprising a first optimised
CC siRNA and a second optimised siRNA. The method is useful in selecting

```
CC   siRNA for generating a gene silencing reagent. The present sequence is
CC   used in the exemplification of the invention.
XX
SQ   Sequence 19 BP; 7 A; 3 C; 7 G; 0 T; 2 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 9.8e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1203 CCTCTTTCCGGGCTCCA 1219
              | |||||||| ||||||
Db         17 CGTCTTTCCGTGCTCCA 1


RESULT 1463
AAQ15432/c
ID   AAQ15432 standard; RNA; 20 BP.
XX
AC   AAQ15432;
XX
DT   21-APR-1994  (first entry)
XX
DE   HPV-16 control primer dT1.
XX
KW   Human papillomavirus; amplification; primer; polymerase chain reaction;
KW   PCR; ss.
XX
OS   Synthetic.
XX
PN   EP415755-A.
XX
PD   06-MAR-1991.
XX
PF   30-AUG-1990;   90EP-00309492.
XX
PR   01-SEP-1989;   89US-00401840.
XX
PA   (LIFE-) LIFE TECHN INC.
XX
DR   WPI; 1991-067289/10.
XX
PT   Avoiding contamination during nucleic acid amplification - using
PT   oligo:nucleotide primer contg. unnatural base which can be selectively
PT   rendered incapable of further amplification.
XX
PS   Example 1; Pag 7; 10pp; English.
XX
CC   Example 1 describes the amplification of HPV-16 DNA by PCR using the
CC   primers given in AAQ15430-31 or AAQ15432-33
XX
SQ   Sequence 20 BP; 2 A; 2 C; 7 G; 9 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1308 CAAGACATACAACTACC 1324
              |||||||||||  | |||
Db         17 CAAGACATACATCGACC 1


RESULT 1464
AAQ15430/c
ID   AAQ15430 standard; RNA; 20 BP.
XX
AC   AAQ15430;
XX
DT   21-APR-1994  (first entry)
XX
DE   HPV-16 primer dU1.
XX
KW   Human papillomavirus; amplification; primer; polymerase chain reaction;
KW   PCR; ss.
XX
OS   Synthetic.
XX
PN   EP415755-A.
XX
PD   06-MAR-1991.
XX
PF   30-AUG-1990;   90EP-00309492.
XX
PR   01-SEP-1989;   89US-00401840.
XX
PA   (LIFE-) LIFE TECHN INC.
XX
DR   WPI; 1991-067289/10.
XX
PT   Avoiding contamination during nucleic acid amplification - using
PT   oligo:nucleotide primer contg. unnatural base which can be selectively
PT   rendered incapable of further amplification.
XX
PS   Example 1; Pag 7; 10pp; English.
XX
CC   Example 1 describes the amplification of HPV-16 DNA by PCR using the
CC   primers given in AAQ15430-31 or AAQ15432-33
XX
SQ   Sequence 20 BP; 2 A; 2 C; 7 G; 0 T; 9 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1308 CAAGACATACAACTACC 1324
              |||||||||||  | |||
Db         17 CAAGACATACATCGACC 1


RESULT 1465
AAQ58627
ID   AAQ58627 standard; DNA; 20 BP.
XX
AC   AAQ58627;
XX
DT   25-MAR-2003  (revised)
DT   25-APR-1994  (first entry)
XX
DE   HPV-6 probe.
XX
KW   Human papillomavirus; HPV; amplification; primer;
KW   polymerase chain reaction; PCR; antibody; assay; nitrocellulose filter;
KW   ss.
XX
OS   Synthetic.
XX
PN   FR2660925-A.
XX
PD   18-OCT-1991.
XX
PF   11-APR-1990;   90FR-00004659.
XX
PR   11-APR-1990;   90FR-00004659.
XX
PA   (INRM ) INSERM INST NAT SANTE & RECH MED.
XX
PI   Tchen P,  Vautherot JF;
XX
DR   WPI; 1992-001368/01.
XX
PT   Fixing nucleotide sequence to solid support, e.g. nylon filter - using
PT   antibody specific for substit. on the sequence as intermediate protein,
PT   useful e.g. in pathogen typing.
XX
PS   Disclosure; Page 14; 20pp; French.
XX
CC   The use of probes fixed by antibodies to nitrocellulose filters was
```

```
CC   exemplified in an assay for HPV. The probes are given in AAQ58627-
CC   AAQ58630 and the primers are given in AAQ58631-Q58634. (Updated on 25-MAR
CC   -2003 to correct PA field.)
XX
SQ   Sequence 20 BP; 5 A; 8 C; 1 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1677 CCCCAACTACATCTTCC 1693
              ||  ||||||||||||||
Db          4 CCGTAACTACATCTTCC 20


RESULT 1466
AAQ34599/c
ID   AAQ34599 standard; DNA; 20 BP.
XX
AC   AAQ34599;
XX
DT   25-MAR-2003  (revised)
DT   10-MAY-1993  (first entry)
XX
DE   Human papilloma virus type 16 PCR primer.
XX
KW   Polymerase chain reaction; HPV 16; amplification; ss.
XX
OS   Synthetic.
XX
PN   EP522884-A1.
XX
PD   13-JAN-1993.
XX
PF   13-JUL-1992;   92EP-00306396.
XX
PR   12-JUL-1991;   91US-00728874.
XX
PA   (LIFE-) LIFE TECHNOLOGIES INC.
XX
PI   Hartley JL,  Berninger M;
XX
DR   WPI; 1993-010692/02.
XX
PT   Oligo:nucleotide-dependent amplification for controlling contamination of
PT   prod - by incorporating an exo-sample nucleotide into products.
XX
PS   Example; Page 10; 18pp; English.
XX
CC   The sequence is that of a PCR primer used in the amplification of a
CC   region of the human papilloma virus type 16 (HPV 16) DNA. (Updated on 25-
CC   MAR-2003 to correct PN field.)
XX
SQ   Sequence 20 BP; 2 A; 2 C; 7 G; 9 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1308 CAAGACATACAACTACC 1324
              ||||||||||| | |||
Db         17 CAAGACATACATCGACC 1


RESULT 1467
AAQ34982/c
ID   AAQ34982 standard; DNA; 20 BP.
XX
AC   AAQ34982;
XX
DT   25-MAR-2003  (revised)
DT   26-MAY-1993  (first entry)
XX
DE   PCR primer PV3(5').
XX
KW   Amplification; cervical cancer; HPV-16; human papillomavirus; ss.
XX
OS   Synthetic.
XX
PN   EP524808-A2.
XX
PD   27-JAN-1993.
XX
PF   22-JUL-1992;   92EP-00306701.
XX
PR   23-JUL-1991;   91US-00733419.
XX
PA   (HOFF ) HOFFMANN LA ROCHE & CO AG F.
PA   (UYNY ) UNIV NEW YORK STATE RES FOUND.
XX
PI   Bloch W,  Nuovo GJ;
XX
DR   WPI; 1993-028856/04.
XX
PT   Compsn. for in situ polymerase chain reaction on fixed cells - involves
PT   preventing reaction until start of thermal cycling, and providing higher
PT   sensitivity and selectivity.
XX
PS   Example 1; Page 10; 14pp; English.
XX
CC   The PCR primer PV3(5') correspond to an oligomer starting at nucleotide
CC   501 of human papillomavirus type 16. The primer is used to demonstrate a
CC   novel in situ PCR method comprising fixed cells, a subset of PCR reagents
CC   and opt. a binding protein for single stranded DNA, or fixed cells, a
CC   complete set of PCR reagents and the binding protein. The method is used
CC   to perform PCR on cells present in histochemical sections or cytochemical
CC   smears, e.g. for biological, forensic or pathological studies. The primer
CC   was one of a pair used to amplify papillomavirus DNA from human cervical
CC   cancer cells SiHa. A 449 bp PCR prod. was obtd. by this method whereas
CC   multiple primer pairs were needed for the same result using conventional
CC   PCR methods. See also AAQ34980-6. (Updated on 25-MAR-2003 to correct PN
CC   field.)
XX
SQ   Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1308 CAAGACATACAACTACC 1324
              ||||||||||| | |||
Db         19 CAAGACATACATCGACC 3


RESULT 1468
AAQ44798/c
ID   AAQ44798 standard; DNA; 20 BP.
XX
AC   AAQ44798;
XX
DT   25-MAR-2003  (revised)
DT   29-SEP-1994  (first entry)
XX
DE   HPV16/pT713 primer.
XX
KW   N4-methyl-cytidine; N4-methyl-deoxycytidine; triphosphate; CTP; dCTP;
KW   substrate; polymerase; cytosine; oligonucleotide; polynucleotide;
KW   sequence analysis; primer extension reaction; PCR;
KW   polymerase chain reaction; amplification.
XX
OS   Synthetic.
XX
PN   WO9405684-A1.
XX
PD   17-MAR-1994.
XX
```

PF 30-AUG-1993; 93WO-US008145.
XX
PR 04-SEP-1992; 92US-00941370.
XX
PA (LIFE-) LIFE TECHNOLOGIES INC.
XX
PI Pless RC;
XX
DR WPI; 1994-101109/12.
XX
PT New N4-alkyl-(deoxy)cytidine 5'-tri:phosphate cpds. - useful in DNA
PT sequence analysis, primer extension reactions and nucleic acid
PT amplification.
XX
PS Disclosure; Page 12; 40pp; English.
XX
CC Cpds. N4-(1-4C alkyl) cytidine 5'-triphosphate (I) and N4-(1-4C alkyl)-2'
CC -deoxycytidine 5'-triphosphate (II) are new. (I) and (II) serve as
CC substrates for RNA and DNA polymerases for incorporation of the N4-(1-4C
CC alkyl)-cytosine moiety into oligo- and polynucleotides. They can be used
CC in DNA sequence analysis, primer extension reactions and nucleic acid
CC amplification. To assess the potential for using N4-methyl-dCTP in PCR
CC amplification, reaction mixts. contg. the canonical nucleotide set were
CC compared to mixts. in which dCTP was replaced by the N4- methylcytosine
CC analogue, in a PCR experiment designed to amplify a 293 bp sequence of
CC HPV16 DNA. Using a high-temp. regimen the desired fragment was obtained
CC with the canonical dNTPs, but not with N4-methyl-dCTP. A low-temp.
CC regimen, conducted with dCTP or with N4-methyl-dCTP in the reaction
CC mixt., cleanly produced identical amts. of the expected fragment as the
CC sole amplification product. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 20 BP; 2 A; 2 C; 7 G; 9 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1308 CAAGACATACAACTACC 1324
||||||||||| | |||
Db 17 CAAGACATACATCGACC 1

RESULT 1469
AAT05336/c
ID AAT05336 standard; cDNA; 20 BP.
XX
AC AAT05336;
XX
DT 31-JAN-1996 (first entry)
XX
DE Peptide transport gene atptr2a PCR primer.
XX
KW Peptide transport gene; atptr2a; disease-resistance; fungus-resistance;
KW insect-resistance; pathogen-resistance; herbicide-resistance;
KW transgenic plant; crop improvement; polymerase chain reaction; primer;
KW RT-PCR; ss.
XX
OS Arabidopsis thaliana.
XX
PN WO9525114-A1.
XX
PD 21-SEP-1995.
XX
PF 10-MAR-1995; 95WO-US002708.
XX
PR 16-MAR-1994; 94US-00212188.
XX
PA (UYTE-) UNIV TENNESSEE RES CORP.
XX
PI Becker JM, Stacey G;
XX
DR WPI; 1995-336935/43.
XX
PT Plant peptide transport genes - used to increase plant resistance to
PT herbicidal peptide(s), pref. those produced by a plant pathogen.
XX
PS Example 8; Page 40; 79pp; English.
XX
CC An upstream primer (AAT05336) starting at base 1975 of the Arabidopsis
CC thaliana peptide transport atptr2a gene (see AAT05334) and a downstream
CC primer (AAT05337) starting at base 2528 were used in RT-PCR to measure
CC the extent of ATPTR2A transcription in plant tissue. A 569 bp fragment of
CC the atptr2a open reading frame is generated
XX
SQ Sequence 20 BP; 3 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 6 GCAGCGTAAAGGATGGA 22
|||||||||| |||||
Db 20 GCAGCGTAAATCATGGA 4

RESULT 1470
AAT11661
ID AAT11661 standard; DNA; 20 BP.
XX
AC AAT11661;
XX
DT 16-JAN-1997 (first entry)
XX
DE Primer for amplifying pigment epithelium-derived factor fragment.
XX
KW Pigment epithelium-derived factor; PEDF; neuronal cells; neurons;
KW glial cells; gliastatic; gliosis; central nervous system; CNS;
KW neurodegenerative disease; injury; neuronotrophic; brain cells;
KW Parkinson's disease; photoreceptor cells; retina; inhibition;
KW proliferation; immunoassay; antibody; ageing; degenerative disease; ss.
XX
OS Synthetic.
XX
PN WO9533480-A1.
XX
PD 14-DEC-1995.
XX
PF 06-JUN-1995; 95WO-US007201.
XX
PR 07-JUN-1994; 94US-00257963.
PR 30-DEC-1994; 94US-00367841.
XX
PA (USSH) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Chader GJ, Becerra SP, Schwartz JP, Taniwaki T;
XX
DR WPI; 1996-039966/04.
XX
PT Use of pigment epithelium derived factor - for enhancing neuronal cell
PT survival and inhibiting glial cell proliferation, useful, e.g. in CNS
PT cell culture or to treat neuro-degenerative diseases.
XX
PS Example 8; Page 38; 151pp; English.
XX
CC Pigment epithelium-derived factor (PEDF) has both neuronotrophic and
CC gliastatic activity, making it useful in cases where neurons die quickly
CC and glia tend to proliferate (gliosis), e.g. in CNS cell culture, in
CC neurodegenerative diseases and in CNS injury. The neuronotrophic effect
CC of PEDF is especially useful for enhancing survival of neuronal cell
CC cultures intended for use in transplantation. These include cultures of
CC human foetal brain cells and neural retina and photoreceptor cells . The
CC gliastatic activity of PEDF can be applied to inhibiting glial cell
CC proliferation in certain tumours. Antibodies directed against PEDF can be
CC used for inhibiting PEDF activity or in an immunoassay for determining
CC levels of PEDF in fluid, cellular or tissue samples e.g for determining
CC ageing and/or other degenerative diseases. Eight primers (AAT11661-68)

```
CC   were synthesised base on the cDNA sequence of PEDF and used to amplify
CC   fragments of the PEDF gene for later sequencing. Two primers (AAT11661,
CC   AAT11662) were used to amplify a 2 kilobase fragment from exon 3 to exon
CC   5 of PEDF
XX
SQ   Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1631 CCAGCAGGCAGCGGCTG 1647
              | ||| ||||||||||
Db          2 CAAGCTGGCAGCGGCTG 18


RESULT 1471
AAT78983/c
ID   AAT78983 standard; DNA; 20 BP.
XX
AC   AAT78983;
XX
DT   13-JAN-1998  (first entry)
XX
DE   Mouse Huntington's disease gene exon 5 primer P586.
XX
KW   Huntington's disease; animal model; transgenic animal; mouse; therapy;
KW   drug screening; mhd gene; polymerase chain reaction; PCR; primer; ss.
XX
OS   Synthetic.
XX
PN   CA2178022-A.
XX
PD   02-DEC-1996.
XX
PF   03-JUN-1996;   96CA-02178022.
XX
PR   01-JUN-1995;   95US-00457273.
XX
PA   (UYBR-) UNIV BRITISH COLUMBIA.
XX
PI   Hayden M,  Lin B,  Nasir J;
XX
DR   WPI; 1997-298677/28.
XX
PT   Mouse Huntington's Disease gene - useful for generating transgenic mice
PT   as a model of Huntington's Disease.
XX
PS   Example 5; Page 31; 69pp; English.
XX
CC   Neo-specific primer P8, (AAT78982), primer P586 (AAT78983) derived from
CC   exon 5 of the mouse Huntington's disease (HD) gene (see AAT78974), and
CC   primer P9 (AAT78984) derived from intron 5 of the gene were used in the
CC   genotype analysis of heterozygous transgenic mice embryos carrying a
CC   targeted mutation in exon 5. The results indicated that loss of function
CC   of the endogenous Hdh gene resulted in embryonic lethality during early
CC   post-implantation development. Transgenic mice can be used as models of
CC   HD
XX
SQ   Sequence 20 BP; 1 A; 5 C; 7 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1666 CACAGGGCAGCCCCCAA 1682
              |||||||||||  | |||
Db         20 CACAGGGCAGCACGCAA 4


RESULT 1472
AAV03721
ID   AAV03721 standard; DNA; 20 BP.
XX
AC   AAV03721;
XX
DT   15-APR-1998  (first entry)
XX
DE   Primer SHR-16 for H chain of Fas specific antibody coding sequence.
XX
KW   Fas; antibody; human; immunoglobulin; variable region; rheumatism;
KW   autoimmune disease; rheumatoid arthritis; therapy; CDR; heavy chain;
KW   complementarity determining region; PCR primer; amplify; ss.
XX
OS   Synthetic.
OS   Mus sp.
XX
PN   EP799891-A1.
XX
PD   08-OCT-1997.
XX
PF   27-MAR-1997;   97EP-00302415.
XX
PR   01-APR-1996;   96JP-00078570.
XX
PA   (SANY ) SANKYO CO LTD.
XX
PI   Serizawa N,  Ichikawa K,  Nakahara K,  Yonehara S;
XX
DR   WPI; 1997-482673/45.
XX
PT   Anti-Fas recombinant antibodies - useful for treating auto-immune
PT   diseases, especially rheumatoid arthritis.
XX
PS   Example 4; Page 16; 72pp; English.
XX
CC   This sequence represents a primer for the coding sequence for the protein
CC   of the invention. The protein of the invention is a recombinant protein
CC   (A), that comprises at least one region corresponding to an
CC   immunoglobulin (Ig) variable region which enables the protein to
CC   recognise and specifically bind to an antigen, preferably human Fas, and
CC   has substantially no more immunogenicity in a human patient than a human
CC   antibody. The proteins are useful for treating autoimmune diseases,
CC   especially rheumatism (rheumatoid arthritis). (A) is based on a murine
CC   monoclonal antibody. As the protein lacks the constant region, it has
CC   substantially no more immunogenicity in the human patient than a human
CC   antibody
XX
SQ   Sequence 20 BP; 2 A; 8 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1452 TCCATTCTTCCTCAGTC 1468
              ||||||| ||||| |||
Db          4 TCCATTCCTCCTCTGTC 20


RESULT 1473
AAT47350/c
ID   AAT47350 standard; DNA; 20 BP.
XX
AC   AAT47350;
XX
DT   10-SEP-1997  (first entry)
XX
DE   Variant #6 of universal primer sequence for M13mp18.
XX
KW   PCR; primer; amplify; polymerase chain reaction; bacteriophage; M13mp18;
KW   cystic fibrosis transmembrane conductance regulator gene; multiplex PCR;
KW   chimeric primer; genetic screening; mutation detection; CFTR;
KW   Wilms Tumour gene; beta-thalassaemia gene; ss.
XX
OS   Synthetic.
XX
```

PN WO9641012-A1.
XX
PD 19-DEC-1996.
XX
PF 06-JUN-1996; 96WO-US009637.
XX
PR 07-JUN-1995; 95US-00474450.
XX
PA (GENZ) GENZYME CORP.
XX
PI Shuber AP;
XX
DR WPI; 1997-052372/05.
XX
PT Universal primer used for multiplex DNA amplification - allows
PT simultaneous amplification of multiple DNA target sequences for high
PT through-put genetic screening.
XX
PS Claim 8; Page 10; 38pp; English.
XX
CC AAT47345-T47374 represent variants of a universal primer sequence (see
CC AAT47344) derived from the bacteriophage vector M13mp18. This sequence
CC can be used as half of the DNA primer of the invention. The primers are
CC used for amplification of a target DNA sequence, and can be used in a
CC multiplex PCR amplification. The primers have the sequence 5'-XY-3',
CC where X is a sequence that does not hybridise to the target sequence
CC (such as this sequence), and Y is a sequence contained within or flanking
CC the target sequence. The melting temperature of a hybrid between X and
CC its complement (in the absence of other sequences) is 60 degrees C.
CC During early cycles of amplification, products are synthesised that
CC contain the chimeric primers on either end. The primers then serve as
CC high stringency recognition sequences for subsequent rounds of
CC amplification. As a result, the annealing efficiency of different primers
CC and their targets in a multiplex amplification reaction is normalised,
CC thereby reducing preferential amplification of certain targets. The
CC chimeric primer comprise a 5' universal domain and a 3' target-specific
CC domain. They are used for the simultaneous PCR amplification of multiple
CC DNA targets in a sample. The primer containing AAT47344 is particularly
CC useful in high-throughput genetic screening for detecting the presence of
CC multiple defined targets e.g. to detect mutations in genes like the
CC cystic fibrosis transmembrane conductance regulator (CFTR), the Wilms
CC Tumour, and the beta-thalassaemia genes
XX
SQ Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1182 TGAGATGGCCACAGGCC 1198
              ||| |||||||| ||||
Db         19 TGACATGGCCACCGGCC 3
```

RESULT 1474
AAV06254/c
ID AAV06254 standard; DNA; 20 BP.
XX
AC AAV06254;
XX
DT 22-APR-1998 (first entry)
XX
DE Puromycin-sensitive aminopeptidase (PSA) antisense oligonucleotide 2.
XX
KW Puromycin-sensitive aminopeptidase; PSA; treatment; cancer; psoriasis;
KW proliferative disorder; hybridise; antisense oligonucleotide; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9738114-A1.
XX
PD 16-OCT-1997.
XX
PF 09-APR-1996; 96WO-EP001518.
XX
PR 09-APR-1996; 96WO-EP001518.
XX
PA (NOVS) NOVARTIS AG.
XX
PI Fontana A, Constam D, Tobler AR, Altmann K, Schlapbach R;
XX
DR WPI; 1997-512727/47.
XX
PT Isolated protein with puromycin-sensitive aminopeptidase activity - which
PT may be used in treatment of proliferative disorders, including cancer and
PT psoriasis.
XX
PS Claim 36; Page 109; 141pp; English.
XX
CC This antisense oligonucleotide is specifically hybridisable with selected
CC DNA or RNA deriving from the puromycin-sensitive aminopeptidase (PSA)-99.
CC This oligonucleotide is used for dignosing conditions associated with PSA
CC expression. The human PSA-99 (875 amino acids) and the murine PSA-99 (920
CC amino acids) both exhibit PSA activity and can be used to generate anti-
CC PSA antibodies. Cell lines which produce the antibody and host cells
CC transfected with vector containing nucleic acid molecules encoding the
CC PSA and the oligonucleotides can be used in assays for identification of
CC agents which act by targeting PSA, for modulating PSA activity or
CC function. They can be used to influence proteolytic degradation of
CC endogenous PSA substrates, proliferation rate or viability of cells or to
CC induce apoptosis within cells by inhibiting PSA activity. Agents which
CC can diminish PSA activity in cells, by modulation of the amount of PSA in
CC cells due to modulation of PSA synthesis, may be used in treatment of
CC proliferative diseases, including tumours such as leukaemias and
CC carcinomas or epithelial disorders like psoriasis
XX
SQ Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        179 GAGGCATAGACAAGACC 195
              |||| ||||||||| ||
Db         18 GAGGGATAGACAAGCCC 2
```

RESULT 1475
AAV33259/c
ID AAV33259 standard; DNA; 20 BP.
XX
AC AAV33259;
XX
DT 25-MAR-2003 (revised)
DT 07-DEC-1998 (first entry)
XX
DE HPV type 16 gene amplifying 5' primer PV3.
XX
KW Human papillomavirus; HPV; human; cervical cancer cell line; SiHa;
KW thermal cycler sample compartment; veterinary; thermal conductivity;
KW in situ PCR; nucleic acid detection; PCR primer; ss.
XX
OS Synthetic.
OS Human papillomavirus.
XX
PN EP863213-A1.
XX
PD 09-SEP-1998.
XX
PF 22-JUL-1992; 98EP-00200769.
XX
PR 23-JUL-1991; 91US-00733419.
PR 22-JUL-1992; 92EP-00306701.
XX
PA (HOFF) HOFFMANN LA ROCHE & CO AG F.

PA (UYNY) UNIV NEW YORK STATE RES FOUND.
XX
PI Bloch W, Nuovo GJ;
XX
DR WPI; 1998-522852/45.
XX
PT New thermal cycler for in-situ PCR on microscope slides - and device for
PT protecting microscope slides from fluid or vapour.
XX
PS Example 1; Page 10; 16pp; English.
XX
CC Sequences shown in AAV33257 to AAV33263 represent primers used for the
CC PCR amplification of the human papillomavirus (HPV) type 16 genome
CC contained in the human cervical cancer cell line SiHa. The invention
CC provides a thermal cycler sample compartment optimised for holding and
CC controlling he temperature of one or more microscopes which facilitates
CC thermal cycling. It also contains a device (barrier) for protecting a
CC microscope slide from fluid or vapour when the slide is sealed in the
CC device, comprising a plastics material that has high thermal
CC conductivity, and is impervious to fluid or vapour, and is dimensioned so
CC as to receive the slide. The new thermal cycling compartment is useful
CC for performing in situ PCR for detection of target nucleic acid sequences
CC directly from cells fixed onto a microscope slide, used in the field of
CC cell biology, forensic science and clinical, veterinary and plant
CC pathology. The modified heat blocks increase the speed and reliability of
CC in situ PCR performed on microscope slides by accelerating and rendering
CC more uniform the heat transfer which occurs during thermal cycling.
CC (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to
CC correct PR field.)
XX
SQ Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1308 CAAGACATACAACTACC 1324
||||||||||| | |||
Db 19 CAAGACATACATCGACC 3

RESULT 1476
AAV85967/c
ID AAV85967 standard; DNA; 20 BP.
XX
AC AAV85967;
XX
DT 10-FEB-1999 (first entry)
XX
DE Mouse LRP-3 cDNA PCR primer 378r (mulrp3 3r).
XX
KW LRP5; LDL-receptor related protein; LRP-3; IDDM; diagnosis; endocytosis;
KW insulin dependent diabetes mellitus; autoimmune disease;
KW glomerulonephritis; inflammation; viral infection; osteoporosis;
KW hypercholesterolemia; Alzheimer's disease; low density lipoprotein;
KW PCR primer; ss.
XX
OS Synthetic.
OS Mus sp.
XX
PN WO9846743-A1.
XX
PD 22-OCT-1998.
XX
PF 15-APR-1998; 98WO-GB001102.
XX
PR 15-APR-1997; 97US-0043553P.
PR 05-JUN-1997; 97US-0048740P.
XX
PA (WELL) WELLCOME TRUST LTD.
PA (MERI) MERCK & CO INC.
XX
PI Todd JA, Hess JW, Caskey CT, Cox RD, Gerhold D, Hammond H;
PI Hey P, Kawaguchi Y, Merriman TR, Metzker ML, Nakagawa Y;
PI Phillips MS, Twells RCJ;
XX
DR WPI; 1998-594573/50.
XX
PT New isolated LDL-receptor related protein - used to develop products for
PT treating, e.g. elevated triglyceride levels, diabetes, autoimmune
PT disorders, inflammation or Alzheimer's disease.
XX
PS Claim 12; Page 117; 200pp; English.
XX
CC The present invention describes LRP5 (low density lipoprotein (LDL)
CC receptor related protein, previously designated LRP-3). Nucleic acid
CC molecules (NAMs) encoding LRP5 can be used for determining if an
CC individual is susceptible to insulin dependent diabetes mellitus (IDDM).
CC The NAMs or proteins can be used for reducing triglyceride levels in the
CC serum of an individual. Therapies that affect LRP5 may also be useful in
CC the treatment of autoimmune diseases such as glomerulonephritis, diseases
CC and disorders involving disruption of endocytosis and/or antigen
CC presentation, cytokine clearance and/or inflammation, viral infection,
CC pathogenic bacterial toxin contamination, elevation of free fatty acids
CC or hypercholesterolemia, type 2 diabetes, osteoporosis, Alzheimer's
CC disease and cardiovascular disease. Products from the present invention
CC can also be used for detection, diagnosis and drug screening. AAV85917 to
CC AAV86012 represent PCR primers for obtaining LRP-3 cDNA
XX
SQ Sequence 20 BP; 1 A; 6 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1435 GAGGATGCCATGAAACA 1451
||||| ||||| |||||
Db 20 GAGGAGGCCATCAAACA 4

RESULT 1477
AAV43733/c
ID AAV43733 standard; DNA; 20 BP.
XX
AC AAV43733;
XX
DT 16-NOV-1998 (first entry)
XX
DE Cancer associated gene primer 2.
XX
KW ss; cancer; PCR; Northern blotting; ribonuclease protection assay;
KW diagnosis; metastatic cancer; primer; amplification.
XX
OS Synthetic.
XX
PN WO9837187-A1.
XX
PD 27-AUG-1998.
XX
PF 18-FEB-1998; 98WO-JP000667.
XX
PR 21-FEB-1997; 97JP-00052508.
XX
PA (TAKI) TAKARA SHUZO CO LTD.
XX
PI Yoshikawa Y, Mukai H, Asada K, Hino F, Kato I;
XX
DR WPI; 1998-467552/40.
XX
PT Detection of cancer cells in tissue samples - by changes in mRNA
PT expression compared to normal tissue of specific cancer-associated gene
PT sequences.
XX
PS Disclosure; Page 67; 92pp; Japanese.
XX
CC The primers AAV43732-V43776 were to produce cancer associated gene

```
CC   fragments which can be used to detect cancer cells in tissue samples or
CC   biological fluids. They are detected by monitoring the change in mRNA
CC   expression as compared to normal tissue of one or more cancer-associated
CC   genes whose cDNA stringently hybridises to the nucleic acid fragments.
CC   The change in expression may be an increase or a decrease compared to
CC   normal tissue. The mRNA expression may be determined by PCR, Northern
CC   blotting or ribonuclease protection assay, or by determining the change
CC   in the amount of protein encoded by the gene(s) as compared to normal
CC   tissue, for example by using a labelled antibody recognising the protein.
CC   Detection of cancer cells for cancer diagnosis, including detection of
CC   metastatic cancer cells in tissues other than the primary tumour site
XX
SQ   Sequence 20 BP; 2 A; 2 C; 7 G; 9 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1055 AGTCAATCCCAACAAAG 1071
              ||||||  || |||||||
Db         17 AGTCAACCCAAACAAAG 1


RESULT 1478
AAV54679/c
ID   AAV54679 standard; DNA; 20 BP.
XX
AC   AAV54679;
XX
DT   13-NOV-1998  (first entry)
XX
DE   Human papillomavirus (HPV) gene amplifying primer PV3.
XX
KW   Human papillomavirus; HPV; thermal cycling device; ceramic sample plate;
KW   biological sample; thermal sensor; heater; cooler; thermal cycling;
KW   rapid heat transfer; microscope slide; PCR amplification; hybridisation;
KW   target nucleic acid; PCR primer; ss.
XX
OS   Synthetic.
OS   Human papillomavirus.
XX
PN   WO9839479-A1.
XX
PD   11-SEP-1998.
XX
PF   03-MAR-1998;   98WO-US004041.
XX
PR   03-MAR-1997;   97US-00810641.
XX
PA   (MINU ) UNIV MINNESOTA.
XX
PI   Blumenfeld M,  Chaplin J;
XX
DR   WPI; 1998-495869/42.
XX
PT   Thermal device for PCR amplification or hybridisation of target nucleic
PT   acid on microscope slide - has ceramic sample plate supporting flat
PT   substrate for sample and heater and cooler controlled to maintain or
PT   rapidly cycle temperature of sample.
XX
PS   Example 2; Page 34; 58pp; English.
XX
CC   Sequences shown in AAV54677 to AAV54683 represent primers used for the
CC   PCR amplification of the Human papillomavirus (HPV) gene contained in the
CC   human cervical cancer cell line SiHa. These are used in the course of the
CC   invention which provides a thermal cycling device comprising a ceramic
CC   sample plate. This device has a ceramic sample plate supporting a flat
CC   substrate carrying a biological sample and a thermal sensor, a heater
CC   thermally coupled to the plate and a cooler for the substrate. The device
CC   either maintains the temperature of the sample or subjects it to thermal
CC   cycling. The thin ceramic plate permits very rapid heat transfer to a
CC   sample on a microscope slide and this thermal cycling devise can be used
CC   for PCR amplification or hybridisation of target nucleic acid on
CC   microscope slide
XX
SQ   Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1308 CAAGACATACAACTACC 1324
              ||||||||||| | |||
Db         19 CAAGACATACATCGACC 3


RESULT 1479
AAV69985
ID   AAV69985 standard; DNA; 20 BP.
XX
AC   AAV69985;
XX
DT   04-FEB-1999  (first entry)
XX
DE   Human c-jun protein antisense oligonucleotide #9.
XX
KW   Human; c-fos; c-jun; activating protein 1; AP-1; diagnosis; metastasis;
KW   antisense oligonucleotide; phosphorothioate; regulation;
KW   malignant tumour; cell cycle expression; hyperproliferative disease; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /note= "phosphorothioate linkages"
XX
PN   WO9846272-A1.
XX
PD   22-OCT-1998.
XX
PF   14-APR-1998;   98WO-US007386.
XX
PR   14-APR-1997;   97US-00837201.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Mckay R,  Miraglia L,  Baker B;
XX
DR   WPI; 1998-609906/51.
XX
PT   Antisense oligonucleotides regulating Activating Protein 1 subunits -
PT   hybridise with c-fos and c-jun mRNA, used for regulating metastasis, cell
PT   cycle expression and hyperproliferative disease.
XX
PS   Claim 12; Page 71; 120pp; English.
XX
CC   AAV69978 to AAV69988 represent antisense oligonucleotides which are
CC   specifically hybridisable with a region of a nucleic acid encoding human
CC   c-Jun protein. The antisense compound regulates the expression of the c-
CC   Jun protein. The present invention also describes antisense
CC   oligonucleotides which regulate the c-Fos protein. The antisense
CC   oligonucleotides are used for the diagnosis and treatment of diseases or
CC   disorders associated with Activating Protein 1 expression, of which c-Fos
CC   and c-Jun are subunits. The antisense oligonucleotides are used in
CC   compositions as c-Fos and/or c-Jun together with a carrier and a
CC   chemotherapeutic agent. They are used to regulate the expression of c-Fos
CC   or c-Jun in cells or tissues, preferably by inhibiting metastasis. They
CC   also regulate cell cycle expression and can be used to treat an animal
CC   with, or being prone to, a hyperproliferative disease
XX
SQ   Sequence 20 BP; 2 A; 11 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
```

```
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        552 GCCCCTCAGCCGCCGCC 568
              ||||||||||| ||| |
Db          2 GCCCCTCAGCCCCCGAC 18


RESULT 1480
AAV32934/c
ID   AAV32934 standard; DNA; 20 BP.
XX
AC   AAV32934;
XX
DT   07-DEC-1998  (first entry)
XX
DE   Human cyclin-dependent protein kinase CDK10 cDNA primer PK22L234.
XX
KW   CDK10; cyclin-dependent protein kinase; cell cycle; human; cancer;
KW   cell proliferation; PCR; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9835015-A1.
XX
PD   13-AUG-1998.
XX
PF   06-FEB-1998;   98WO-US002337.
XX
PR   07-FEB-1997;   97US-0037855P.
PR   14-APR-1997;   97GB-00007491.
XX
PA   (MERI ) MERCK & CO INC.
XX
PI   Gerhold DL;
XX
DR   WPI; 1998-447213/38.
XX
PT   New nucleic acid encoding human cyclin-dependent kinase-10 - used e.g. to
PT   identify modulators of cell cycle progression for treating cancer or
PT   immune cell proliferation.
XX
PS   Example 1; Page 27; 58pp; English.
XX
CC   Gene-specific primer PK22L234 and adapter primer AP1 (see AAV32935) were
CC   used in a RACE PCR technique for cloning a 5' coding region of novel
CC   human cyclin-dependent kinase 10 (CDK10) cDNA, using adapter-ligated
CC   human placenta cDNA as template. Nested primers (see AAV32936-37) were
CC   used in a second PCR, to produce an approximately 600 bp product. A 3'
CC   fragment was identified by database search, and a full-length sequence
CC   (see AAV32932) was produced in vector pLITMUS28:CDK10. The CDK10 protein
CC   product (see AAW49083) is used e.g. to identify modulators of cell cycle
CC   progression and for treating cancer or immune cell proliferation
XX
SQ   Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1160 GGGGTGTGGGCTGCATC 1176
              ||  |||||||||||||
Db         18 GGTCTGTGGGCTGCATC 2


RESULT 1481
AAX05691/c
ID   AAX05691 standard; DNA; 20 BP.
XX
AC   AAX05691;
XX
DT   26-APR-1999  (first entry)
XX
DE   Barnase open reading frame fragment amplifying primer.
XX
KW   Plant transformation; T-DNA; toxin; transgenic; transgenic food;
KW   binary vector; PCR primer; barnase; ss.
XX
OS   Synthetic.
XX
PN   WO9901563-A1.
XX
PD   14-JAN-1999.
XX
PF   29-JUN-1998;   98WO-EP004171.
XX
PR   30-JUN-1997;   97EP-00201990.
XX
PA   (MOGE-) MOGEN INT NV.
XX
PI   Stuiver MH,  Ponstein AS,  Ohl SA,  Goddijn OJM,  Simons LH;
PI   Dekker BMM,  Hoekstra S,  Tigelaar H,  Elzinga N;
XX
DR   WPI; 1999-106063/09.
XX
PT   New vector for plant transformation - useful for producing toxins that
PT   are specific to certain plants, or those which act on membrane systems
PT   and/or other cellular structures.
XX
PS   Example 4; Page 21; 34pp; English.
XX
CC   The invention relates to a vector for plant transformation, comprising a
CC   T-DNA with flanking T-DNA borders and also a polynucleotide that prevents
CC   the development of plant transformants containing more vector sequences
CC   than the T-DNA sequence. The vectors encode toxins that are specific to
CC   certain plants, or those which act on membrane systems and /or other
CC   cellular structures. Examples of genes include those encoding ribozymes
CC   against endogenous RNA transcripts, proteins evoking hypersensitive
CC   reactions, and RNA transcripts used for antisense/co- suppression
CC   inhibition of gene expression. The polynucleotide sequence contained in
CC   the vectors prevents the transfer of DNA sequences beyond the T-DNA
CC   borders. This avoids contamination of transgenic plants and/ or
CC   transgenic food with vector DNA. Sequences AAX05690-91 represent primers
CC   used for the PCR amplification of the barnase open reading frame. This is
CC   used in the construction of a barnase expression cassette
XX
SQ   Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        115 CCGATCGCCATGGATCG 131
              | |||| ||||||||||
Db         20 CAGATCTCCATGGATCG 4


RESULT 1482
AAZ31303
ID   AAZ31303 standard; DNA; 20 BP.
XX
AC   AAZ31303;
XX
DT   24-JAN-2000  (first entry)
XX
DE   CCR5 gene inhibiting antisense oligo AS(s)-60.
XX
KW   HIV cofactor inhibitor; HIV infection; CXCR4 gene; CCR5 gene;
KW   drug composition; antisense; ss.
XX
OS   Synthetic.
XX
PN   WO9951751-A1.
XX
PD   14-OCT-1999.
XX
```

```
PF   01-APR-1999;   99WO-JP001722.
XX
PR   02-APR-1998;   98JP-00125452.
XX
PA   (MARI-) MARINE BIO CO LTD.
XX
PI   Takaku H,  Yamamoto N,  Kimura T,  Takai K,  Wada A;
XX
DR   WPI; 1999-620207/53.
XX
PT   Antisense oligonucleotide-based HIV cofactor inhibitors, as drug
PT   compositions for treatment of HIV infection.
XX
PS   Claim 6; Page 16; 59pp; Japanese.
XX
CC   The invention provides HIV cofactor inhibitors that contain
CC   oligonucleotides with a base sequence complementary to the CXCR4 or CCR5
CC   genes. Such inhibitors can be formulated into drug compositions for
CC   prevention or treatment of HIV infection, with inhibition of expression
CC   of CXCR4 or/and CCR5 gene. Sequences AAZ31244-306 represent antisense
CC   oligonucleotides to the CCR5 gene
XX
SQ   Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         92 CTGAGGTTGCTCGCGCG 108
              ||||| |||||||| ||
Db          3 CTGAGCTTGCTCGCTCG 19


RESULT 1483
AAZ04231
ID   AAZ04231 standard; DNA; 20 BP.
XX
AC   AAZ04231;
XX
DT   07-OCT-1999  (first entry)
XX
DE   PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW   Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW   paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
KW   nongonococcal uretritis; epidymitis; cervicitis; salpingitis; PCR primer;
KW   bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
OS   Synthetic.
OS   Chlamydia trachomatis.
XX
PN   WO9928475-A2.
XX
PD   10-JUN-1999.
XX
PF   27-NOV-1998;   98WO-IB001939.
XX
PR   28-NOV-1997;   97FR-00015041.
PR   17-DEC-1997;   97FR-00016034.
PR   04-NOV-1998;   98US-0107077P.
XX
PA   (GEST ) GENSET.
XX
PI   Griffais R;
XX
DR   WPI; 1999-371125/31.
XX
PT   Genome sequence of Chlamydia trachomatis.
XX
PS   Disclosure; Page 1671; 1755pp; English.
XX
CC   PCR primers AAZ01426-Z06209 were used to amplify open reading frames
CC   (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
CC   encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
CC   against Chlamydia trachomatis. Antisense and ribozyme sequences can also
CC   be used to control growth of the microorganism. Chlamydia trachomatis is
CC   responsible for a large number of diseases, e.g. eye diseases such as
CC   conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
CC   conjunctivitis; genital diseases such as nongonococcal uretritis,
CC   epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;
CC   pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
CC   The polypeptides of the invention may be of use in treating these
CC   diseases
XX
SQ   Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1724 ATGTTCACCTGCCCACT 1740
              ||||||| |||| ||||
Db          2 ATGTTCATCTGCGCACT 18


RESULT 1484
AAZ02916
ID   AAZ02916 standard; DNA; 20 BP.
XX
AC   AAZ02916;
XX
DT   07-OCT-1999  (first entry)
XX
DE   PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW   Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW   paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
KW   nongonococcal uretritis; epidymitis; cervicitis; salpingitis; PCR primer;
KW   bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
OS   Synthetic.
OS   Chlamydia trachomatis.
XX
PN   WO9928475-A2.
XX
PD   10-JUN-1999.
XX
PF   27-NOV-1998;   98WO-IB001939.
XX
PR   28-NOV-1997;   97FR-00015041.
PR   17-DEC-1997;   97FR-00016034.
PR   04-NOV-1998;   98US-0107077P.
XX
PA   (GEST ) GENSET.
XX
PI   Griffais R;
XX
DR   WPI; 1999-371125/31.
XX
PT   Genome sequence of Chlamydia trachomatis.
XX
PS   Disclosure; Page 1564; 1755pp; English.
XX
CC   PCR primers AAZ01426-Z06209 were used to amplify open reading frames
CC   (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
CC   encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
CC   against Chlamydia trachomatis. Antisense and ribozyme sequences can also
CC   be used to control growth of the microorganism. Chlamydia trachomatis is
CC   responsible for a large number of diseases, e.g. eye diseases such as
CC   conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
CC   conjunctivitis; genital diseases such as nongonococcal uretritis,
CC   epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;
CC   pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
CC   The polypeptides of the invention may be of use in treating these
CC   diseases
XX
```

```
SQ   Sequence 20 BP; 7 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1433 CAGAGGATGCCATGAAA 1449
              ||||||||||  |||||
Db          1 CAGAGGATGCTGTGAAA 17


RESULT 1485
AAZ05240/c
ID   AAZ05240 standard; DNA; 20 BP.
XX
AC   AAZ05240;
XX
DT   07-OCT-1999  (first entry)
XX
DE   PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW   Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW   paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
KW   nongonococcal uretritis; epidymitis; cervicitis; salpingitis; PCR primer;
KW   bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
OS   Synthetic.
OS   Chlamydia trachomatis.
XX
PN   WO9928475-A2.
XX
PD   10-JUN-1999.
XX
PF   27-NOV-1998;   98WO-IB001939.
XX
PR   28-NOV-1997;   97FR-00015041.
PR   17-DEC-1997;   97FR-00016034.
PR   04-NOV-1998;   98US-0107077P.
XX
PA   (GEST ) GENSET.
XX
PI   Griffais R;
XX
DR   WPI; 1999-371125/31.
XX
PT   Genome sequence of Chlamydia trachomatis.
XX
PS   Disclosure; Page 1754; 1755pp; English.
XX
CC   PCR primers AAZ01426-Z06209 were used to amplify open reading frames
CC   (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
CC   encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
CC   against Chlamydia trachomatis. Antisense and ribozyme sequences can also
CC   be used to control growth of the microorganism. Chlamydia trachomatis is
CC   responsible for a large number of diseases, e.g. eye diseases such as
CC   conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
CC   conjunctivitis; genital diseases such as nongonococcal uretritis,
CC   epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;
CC   pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
CC   The polypeptides of the invention may be of use in treating these
CC   diseases
XX
SQ   Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        989 CCCAGAACCTGCTCATC 1005
              ||||||| |||| ||||
Db         19 CCCAGAATCTGCACATC 3


RESULT 1486
AAX23549/c
ID   AAX23549 standard; DNA; 20 BP.
XX
AC   AAX23549;
XX
DT   18-JUN-1999  (first entry)
XX
DE   Deletion sequence oligonucleotide 2.
XX
KW   Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen;
KW   probe; cellular adhesion modulator; cellular proliferation modulator;
KW   human retrovirus; human immunodeficiency virus; non-human retrovirus;
KW   HIV; primer; ss.
XX
OS   Synthetic.
XX
PN   WO9911820-A1.
XX
PD   11-MAR-1999.
XX
PF   01-SEP-1998;   98WO-US018084.
XX
PR   02-SEP-1997;   97US-00923771.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Chen D,  Srivatsa GS;
XX
DR   WPI; 1999-205198/17.
XX
PT   New compositions comprising sensor arrays made up of unique probe
PT   oligonucleotides - useful for characterizing a sample of target deletion
PT   oligonucleotides.
XX
PS   Example 1; Page 89; 163pp; English.
XX
CC   This invention describes a novel composition comprising a number of
CC   sensor arrays, where each array comprises a unique probe oligonucleotide,
CC   which is the reverse complement of part of a unique target
CC   oligonucleotide present in a mixture of target deletion sequence
CC   oligonucleotides. The compositions form a method for characterizing a
CC   sample of target deletion oligonucleotides which are labelled and
CC   hybridize with the probe oligonucleotides of the sensor arrays. Such
CC   oligonucleotides and their targets are represented in AAX23548-X23709.
CC   Oligonucleotides characterized by the method form pharmaceutical
CC   compositions that are useful for modulating cellular adhesion or
CC   proliferation, and being active against a eukaryotic pathogen, a human
CC   retrovirus, a human immunodeficiency virus (HIV), or a non-human
CC   retrovirus, including influenza virus, Epstein-Barr virus, Respiratory
CC   Syncytial Virus or cytomegalovirus (CMV). The compositions enable
CC   characterization of deletion sequence oligonucleotides having related,
CC   but different nucleobase sequences, and quantification of different
CC   species of deletion sequence ("target") oligonucleotides in a mixture.
CC   Also, if the specificity of the oligonucleotide's nucleobase sequence for
CC   its reverse complement is not modified, the method may be performed using
CC   oligodeoxynucleotides
XX
SQ   Sequence 20 BP; 0 A; 5 C; 5 G; 10 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        133 ATGAAGAAGATCAAACG 149
              | |||||||| ||||||
Db         18 AAGAAGAAGAGCAAACG 2


RESULT 1487
AAX92036
ID   AAX92036 standard; DNA; 20 BP.
XX
```

AC AAX92036;
XX
DT 13-SEP-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
OS Synthetic.
OS Chlamydophila pneumoniae.
XX
PN WO9927105-A2.
XX
PD 03-JUN-1999.
XX
PF 20-NOV-1998; 98WO-IB001890.
XX
PR 21-NOV-1997; 97FR-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
PA (GEST) GENSET.
XX
PI Griffais R;
XX
DR WPI; 1999-357842/30.
XX
PT Genome sequence of Chlamydia pneumoniae.
XX
PS Page 1480; Disclosure; 1912pp; English.
XX
CC AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AAX91990). C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotides sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
XX
SQ Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1468 CTGGGGGAGCGGATCCA 1484
              ||| | ||||||||||
Db          4 CTGCGAGAGCGGATCCA 20
```

RESULT 1488
AAZ46520
ID AAZ46520 standard; DNA; 20 BP.
XX
AC AAZ46520;
XX
DT 13-MAR-2000 (first entry)
XX
DE Human EST JRL4A1 amplifying forward primer.
XX
KW Retinal calcium channel; RCC gene; alpha1F-subunit; retinal disorder;
KW myopia; nystagmus; strabismus; calcium-regulated development pathway;
KW eye disorder; human; EST; expressed sequence tag; CSNB; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9963078-A2.
XX
PD 09-DEC-1999.
XX
PF 02-JUN-1999; 99WO-CA000514.
XX
PR 02-JUN-1998; 98US-0087635P.
XX
PA (UYTE-) UNIV TECHNOLOGIES INT INC.
XX
PI Bech-Hansen T, Naylor MJ;
XX
DR WPI; 2000-097327/08.
XX
PT New isolated mammalian retinal calcium channel gene, used to develop
PT products for the diagnosis and treatment of incomplete congenital
PT stationary night blindness and related disorders.
XX
PS Disclosure; Page 15; 55pp; English.
XX
CC The invention provides a DNA molecule comprising a sequence of
CC nucleotides encoding an alpha1F-subunit of a mammalian retinal calcium
CC channel (RCC), including a human alpha1F-subunit, a murine alpha1F-
CC subunit and orthologs of the human and murine alpha1F-subunits. The RCC
CC gene may be used to develop products for diagnostic tests, for incomplete
CC CSMB and risk assessment in affected families. The RCC gene can provide
CC information as to the basic defect in this retinal conditions, which
CC could lead to effective methods for treatment or cure of the disorder. As
CC the associated features of myopia, nystagmus and strabismus frequently
CC observed in patients with incomplete CSNB may be caused by calcium-
CC regulated development pathways, identification of the RCC gene may help
CC to elucidate the molecular details of eye development and which may lead
CC to treatment for related eye disorders or diseases. Sequences AAZ46520-21
CC represent primers for amplifying the human expressed seqeunce tsg (EST)
CC JRL4A1
XX
SQ Sequence 20 BP; 1 A; 6 C; 2 G; 11 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1698 TTACTCTCTGCCTACCT 1714
              || |||||| ||||||
Db          1 TTTCTCTCTGTCTACCT 17
```

RESULT 1489
AAZ69753/c
ID AAZ69753 standard; DNA; 20 BP.
XX
AC AAZ69753;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker upstream amplification primer SEQ ID NO:4109.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX

```
PA   (GEST ) GENSET.
XX
PI   Cohen D,  Blumenfeld M,  Chumakov I;
XX
DR   WPI; 2000-013267/01.
XX
PT   Novel biallelic markers used to construct a high density disequilibrium
PT   map of the human genome.
XX
PS   Claim 8; Page 1107; 2745pp; English.
XX
CC   AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC   invention, which contain a polymorphic base at position 24 of their
CC   nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC   primers for the biallelic markers. The biallelic markers of the invention
CC   have a variety of uses: they can be used for high density mapping of the
CC   human genome, and in complex association studies and haplotyping studies
CC   which are useful in determining the genetic basis for disease states.
CC   Compositions and methods of the invention can also be useful for the
CC   identification of the targets for the development of pharmaceutical
CC   agents and diagnostic methods, as well as the characterisation of the
CC   differential efficacious responses to and side effects from
CC   pharmaceutical agents acting on a disease as well as other treatment.
CC   N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC   3367, are not actually given a sequence in the Sequence Listing from the
CC   present invention
XX
SQ   Sequence 20 BP; 2 A; 3 C; 6 G; 9 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1060 ATCCCAACAAAGACATA 1076
              ||| ||||| |||||||
Db         18 ATCACAACACAGACATA 2


RESULT 1490
AAA61782/c
ID   AAA61782 standard; DNA; 20 BP.
XX
AC   AAA61782;
XX
DT   23-OCT-2000  (first entry)
XX
DE   Human serine protease BSSP6 (hBSSP6), RACE PCR primer, SEQ ID NO:23.
XX
KW   BSSP6; serine protease; human; hBSSP6; mouse; mBSSP6; brain;
KW   diagnostic marker; antibody; transgenic animal; Alzheimer's disease;
KW   epilepsy; cancer; inflammation; infertility; pancreatitis;
KW   prostatic hypertrophy; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200031257-A1.
XX
PD   02-JUN-2000.
XX
PF   19-NOV-1999;   99WO-JP006476.
XX
PR   20-NOV-1998;   98JP-00347802.
XX
PA   (FUSO ) FUSO PHARM IND LTD.
XX
PI   Uemura H,  Okui A,  Kominami K,  Yamaguchi N,  Mitsui S;
XX
DR   WPI; 2000-400067/34.
XX
PT   Serine protease BSSP6, useful in detecting homologs, mutants and
PT   polymorphic variants as markers for diagnosis of Alzheimer's disease,
PT   epilepsy, cancer, inflammation, infertility and prostate hypertrophy,
PT   using blood or other tissues.
XX
PS   Example 1; Page 30; 94pp; Japanese.
XX
CC   The invention relates to novel serine proteases designated BSSP6
CC   (AAB11712-B11714), and to nucleic acids encoding them (AAA61763-A61765).
CC   The invention also relates to vectors and transformants comprising BSSP6
CC   nucleic acids; transgenic animals in which the expression level of BSSP6
CC   can be varied; and an mBSSP6 knockout mouse. The invention additionally
CC   encompasses anti-BSSP6 antibodies and methods of production of such
CC   antibodies, methods of BSSP6 detection using the antibodies, and the use
CC   of BSSP6 proteins or fragments as diagnostic markers for certain medical
CC   conditions. Nucleotides encoding BSSP6 were initially isolated in a human
CC   brain cDNA library using degenerate PCR primers (AAA61795-A61796) based
CC   on conserved regions of serine proteases. The BSSP6 serine proteases and
CC   nucleotides encoding them are useful in detecting homologues, mutants and
CC   polymorphic variants in biological samples (e.g., blood, urine, brain,
CC   prostate gland, placenta, testis and spleen) as diagnostic markers for
CC   conditions such as Alzheimer's disease, epilepsy, cancer, inflammation,
CC   infertility and prostatic hypertrophy. Sequences AAA61768-A61796
CC   represent PCR primers used in the exemplifications of the invention.
CC   Primers AAA61775-A61784 and AAA61793- AAA61796 were used to isolate and
CC   amplify human BSSP6 cDNAs (AAA61763, AAA61765), while primers AAA61785-
CC   A61792 were used to isolate and amplify murine BSSP6 cDNA (AAA61764).
CC   Primers AAA61768-A61774 were used to construct plasmids used in the
CC   invention
XX
SQ   Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         44 GAGGACCAGCAGTGTGA 60
              ||| ||||| |||||||
Db         20 GAGCACCAGAAGTGTGA 4


RESULT 1491
AAX89471/c
ID   AAX89471 standard; DNA; 20 BP.
XX
AC   AAX89471;
XX
DT   15-FEB-2000  (first entry)
XX
DE   PCR primer used to screen a BAC library for 14-3-3 sigma.
XX
KW   14-3-3 sigma; HME1; stratifin; p53; diagnosis; cancer; psoriasis; polyp;
KW   psoriasis; wart; inflammatory disease; proliferation; ss; PCR primer.
XX
OS   Synthetic.
XX
PN   WO9931240-A2.
XX
PD   24-JUN-1999.
XX
PF   18-DEC-1998;   98WO-US026924.
XX
PR   18-DEC-1997;   97US-0069416P.
PR   15-DEC-1998;   98US-00210748.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Hermeking H,  Vogelstein B,  Kinzler KW;
XX
DR   WPI; 2000-022907/02.
XX
PT   Use of 14-3-3 sigma polypeptides and nucleic acids for the diagnosis or
PT   treatment of cancer.
XX
PS   Example 3; Page 33; 73pp; English.
XX
CC   PCR primers AAX89470-X89471 are used to screen a BAC library for the
```

CC presence of a 14-3-3 sigma nucleotide sequence. 14-3-3 sigma is a member
CC of the 14-3-3 protein family and is also known as HME1 or stratifin. 14-3
CC -3 sigma expression is regulated by p53 and exogenous expression of 14-3-
CC 3 sigma results in G2 block. The 14-3-3 sigma nucleotide and amino acid
CC sequences are used in the invention to develop agents for the diagnosis,
CC susceptibility determination and treatment of cancer. The amino acid
CC sequence can be used in method for suppressing the growth of tumour
CC cells. The 14-3-3 sigma polypeptides can mediate cell cycle arrest upon
CC damage to cellular DNA. 14-3-3 sigma probes can be used for diagnosing,
CC testing susceptibility to or treating cancers and identifying agents for
CC treating cancers. They can also be used to treat other proliferative
CC diseases, e.g. psoriasis, polyps, warts, and inflammatory diseases. The
CC 14-3-3 sigma antisense oligonucleotides can be used for promoting the
CC proliferation and growth of cells
XX
SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        843 TGAGTACCTGGACAAGG 859
              ||||||| ||| ||||
Db         18 TGAGTACCGGGAGAAGG 2
```

RESULT 1492
AAA29848/c
ID AAA29848 standard; DNA; 20 BP.
XX
AC AAA29848;
XX
DT 25-AUG-2000 (first entry)
XX
DE Human jun N-terminal kinase kinase-2 antisense oligonucleotide #33.
XX
KW Human; jun N-terminal kinase kinase-2; JKK-2; modulation; tumour;
KW antiinflammatory; cytostatic; antiinfectious; infection; inflammation;
KW detection; antisense therapy; phosphorothiaote; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= a
FT /note= "Phosphorothioate linkages"
XX
PN US6054440-A.
XX
PD 25-APR-2000.
XX
PF 24-JUN-1999; 99US-00344001.
XX
PR 24-JUN-1999; 99US-00344001.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP, Cowsert LM;
XX
DR WPI; 2000-338506/29.
XX
PT Antisense compound specifically hybridizing and inhibiting the expression
PT of human Jun N-terminal kinase kinase-2 is useful for treating infection,
PT inflammation and tumor.
XX
PS Claim 3; Col 40; 31pp; English.
XX
CC The present invention describes an antisense compound (I) of 8-30
CC nucleobases, specifically hybridising to, and inhibiting expression of,
CC human jun N-terminal kinase kinase-2 (JKK-2). Also described is a method
CC of inhibiting the expression of human JKK-2 in human cells or tissues,
CC comprising contacting the cells or tissues, with (I), in vitro. (I) has
CC antiinflammatory, cytostatic and antiinfectious activities. (I) is useful
CC for inhibiting the expression of JKK-2 in human cells or tissues and
CC prevents or delays infection, inflammation or tumour formation associated
CC with altered expression of JKK-2. (I) is also useful for detecting the
CC levels of JKK-2 in a sample. The present sequence represents a
CC phosphorothioate antisense oligonucleotide for human JKK-2, from the
CC present invention
XX
SQ Sequence 20 BP; 2 A; 4 C; 10 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        974 ACCGAGACCTCAAGCCC 990
              |||| ||| ||||||||
Db         20 ACCGCGACGTCAAGCCC 4
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RESULT 1493
AAA30532
ID AAA30532 standard; DNA; 20 BP.
XX
AC AAA30532;
XX
DT 15-SEP-2003 (revised)
DT 21-AUG-2000 (first entry)
XX
DE C. tropicalis CYP52A5A/CYP52A5B QC-RT-PCR primer, SEQ ID NO:47.
XX
KW Cytochrome P450; NADPH reductase; monooxygenase; CYP52A; CPR; POX;
KW omega hydroxylase complex; omega-oxidation; fatty acid; alkane;
KW alpha-omega-dicarboxylic acid production;
KW quantitative competitive reverse transcription-PCR; QC-RT-PCR primer; ss.
XX
OS Candida tropicalis; ATCC20366.
XX
PN WO200020566-A2.
XX
PD 13-APR-2000.
XX
PF 10-SEP-1999; 99WO-US020797.
XX
PR 05-OCT-1998; 98US-0103099P.
PR 10-MAR-1999; 99US-0123555P.
XX
PA (HENK) HENKEL CORP.
XX
PI Wilson CR, Craft DL, Eirich LD, Eshoo M, Madduri KM, Cornett CA;
PI Brenner AA, Tang M, Loper JC, Gleeson M;
XX
DR WPI; 2000-317711/27.
XX
PT Cytochrome P450 nicotine adenine dinucleotide phosphate oxidoreductase
PT and cytochrome P450 monooxygenase nucleic acids and encoded proteins,
PT useful for overproducing dicarboxylic acids.
XX
PS Example 11; Page 44; 200pp; English.
XX
CC The invention relates to 12 novel genomic DNA sequences and proteins
CC which are components of the omega hydroxylase complex of Candida
CC tropicalis ATCC 20366. The DNA sequences (AAA30566-A30577) respectively
CC encode cytochrome P450 NADPH oxidoreductases CPRA and CPRB (AAY90596,
CC AAY90597) and cytochrome P450 monooxygenases CYP52A1A, CYP52A2A,
CC CYP52A2B, CYP52A3A, CYP52A3B, CYP52A5A, CYP52A5B, CYP52A8A, CYP52A8B and
CC CYP52D4A (AAY90598-Y90607). Of the cytochrome P450 DNAs isolated, six are
CC unique CYP genes and four are potential alleles. The omega hydroxylase
CC complex is a membrane-bound enzyme complex found in certain yeasts which
CC catalyses the first step in the omega-oxidation of fatty acids or
CC alkanes, this being primary oxidation of the terminal methyl group. Such
CC yeasts, which include members of the genus Candida, excrete alpha-omega-
CC dicarboxylic acids when alkanes or fatty acids are used as the carbon
CC source. The products of the P450 genes CYP52A1, CYP52A2 and CYP52A5 were
CC identified as playing a greater role in the omega-oxidation of long chain

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CC   fatty acids via a novel quantitative competitive reverse transcription-
CC   PCR (QC-RT-PCR). This assay quantifies the amount of target mRNA in a
CC   sample and may be used for discriminating members of a gene family, such
CC   as the CYP gene family. Organisms containing the target gene are cultured
CC   on an organic substrate which causes upregulation of that gene. The total
CC   RNA is then extracted and mixed with a known amount of competitor RNA,
CC   which is similar to the target mRNA but has fewer nucleotides. RT-PCR
CC   reactions are performed using increasing amounts of competitor RNA and
CC   the point at which the amount of the corresponding target DNA is equal to
CC   the amount of the corresponding competitor DNA is determined. The CPR and
CC   CYP nucleic acids may be transformed into a suitable host so that the
CC   host overexpresses the corresponding proteins. Such host cells will
CC   overproduce dicarboxylic acids. The dicarboxylic acids thus produced find
CC   application as thermoplastics, plasticising agents, lubricants, hydraulic
CC   fluids, agricultural chemicals, pharmaceuticals, dyes, surfactants,
CC   adhesives and fragrances. The CPR and CYR nucleic acids and proteins
CC   enable inexpensive large scale production of industrially useful
CC   dicarboxylic acids. Sequences AAA30522-A30543 represent QC-RT-PCR primers
CC   used in an exemplification of the invention to amplify the Candida
CC   tropicalis ATCC20366 CPR, CYP and beta-oxidation POX gene target mRNA.
CC   (Updated on 15-SEP-2003 to standardise OS field)
XX
SQ   Sequence 20 BP; 7 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1010 AGAGGGGAGAGCTCAAG 1026
              ||||||  ||  |||||||
Db          2 AGAGGGCAGGGCTCAAG 18


RESULT 1494
AAA78243
ID   AAA78243 standard; DNA; 20 BP.
XX
AC   AAA78243;
XX
DT   16-NOV-2000  (first entry)
XX
DE   Anti-human Fas antibody CH11 H chain cDNA specific primer SHR-16.
XX
KW   Antirheumatic agent; immunoglobulin M; IgM; apoptosis inducer;
KW   immunosuppression; autoimmune disease; treatment; rheumatism;
KW   anti-Fas antibody; primer; ss.
XX
OS   Synthetic.
XX
PN   JP2000154149-A.
XX
PD   06-JUN-2000.
XX
PF   17-SEP-1999;   99JP-00263984.
XX
PR   18-SEP-1998;   98JP-00264598.
XX
PA   (SANY ) SANKYO CO LTD.
XX
DR   WPI; 2000-454476/40.
XX
PT   Anti-human Fas humanizing antibody-containing antirheumatic agents.
XX
PS   Disclosure; Page 16; 109pp; Japanese.
XX
CC   The present invention relates to antirheumatic agents which comprise as
CC   active ingredients an immunoglobulin M (IgM) protein. The IgM protein
CC   does not include a J segment, has apoptosis inducing activity, and
CC   consists of a light and heavy chain polypeptide produced synthetically.
CC   The agents of the invention exhibit antirheumatic and immunosuppressive
CC   activity and can be used to treat autoimmune diseases, especially
CC   rheumatism. The IgM molecule used in the invention has human Fas-antigen
CC   binding properties. Included in the invention are nucleotide sequences of
CC   the IgM light and heavy chains (see AAA78267-A78272) and the
CC   corresponding protein sequences (see AAB12913-B12918 and AAB12919), and
CC   nucleotide sequences of the humanised anti-human Fas Ig CH11 (see
CC   AAA78202-A78206) and protein sequences (see AAB12908-B12910). Also
CC   included are anti-human Fas antibody CDR peptides (AAB12902-B12907).
CC   Primers specific for the anti-human Fas antibody, light, heavy and kappa
CC   chains used in the invention are represented by sequences AAA78213-
CC   A78266. Primers used for sequencing the human Ig DNA used in the
CC   invention are represented by sequences AAA78277-A78318 and AAA78335-
CC   A78337, while humanised anti-Fas Ig DNA sequencing primers are
CC   represented by sequences AAA78321-A78334 and AAA78338-A78367. Primer
CC   sequences AAA78207-A78212 are specific for murine Ig DNA, and are used in
CC   the production of the agent of the invention
XX
SQ   Sequence 20 BP; 2 A; 8 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1452 TCCATTCTTCCTCAGTC 1468
              |||||||  |||||  |||
Db          4 TCCATTCCTCCTCTGTC 20


RESULT 1495
AAZ59944/c
ID   AAZ59944 standard; DNA; 20 BP.
XX
AC   AAZ59944;
XX
DT   08-MAY-2000  (first entry)
XX
DE   Human dopamine beta-hydroxylase (DBH) PCR primer, SEQ ID NO:2.
XX
KW   Drug exposure; drug abuse; gene expression; EST; expressed sequence tag;
KW   identification; tolerance; addiction; therapy; screening;
KW   cellular response; ethanol; expression analysis; Northern blot;
KW   dopamine beta-hydroxylase; DBH; norepinephrine;
KW   reverse transcriptase-PCR; RT-PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO9967267-A1.
XX
PD   29-DEC-1999.
XX
PF   22-JUN-1999;   99WO-US013839.
XX
PR   22-JUN-1998;   98US-0090268P.
PR   21-JUN-1999;   99US-00337022.
XX
PA   (REGC ) UNIV CALIFORNIA.
XX
PI   Miles MF,  Lai C,  Lockhart DJ;
XX
DR   WPI; 2000-147195/13.
XX
PT   Novel methods for evaluating an organisms response to alcohol used to
PT   evaluate drug treatment and identifying susceptibility to alcohol.
XX
PS   Example 3; Page 68-69; 98pp; English.
XX
CC   The invention relates the identification of genes whose expression levels
CC   are altered by chronic exposure to one or more drugs of abuse (e.g.,
CC   ethanol, stimulants, opiates). The methods of the invention monitor the
CC   response of a cell to a drug of abuse, and comprise contacting the cell
CC   with the drug of abuse, and detecting the expression of one or more of
CC   218 expressed sequence tags (ESTs) via the use of probes that
CC   specifically hybridise to the ESTs. The methods are used to identify
CC   genes whose expression levels are altered by chronic or acute exposure to
CC   one or more drugs of abuse. The identification of genes whose regulation
CC   is altered in alcohol tolerance and/or addiction provides a valuable tool
```

CC to evaluate the response to one or more drugs of abuse. Evaluation of the
CC nature of this response provides information useful in designing
CC therapeutic and recovery regimens, and in evaluating the susceptibility
CC of an organism or patient to drugs in a medical context. Monitoring the
CC expression of identified genes and/or ESTs provides a mechanism by which
CC test agents can be screened for the ability to alter or modulate the
CC response of the organism to drugs of abuse. Sequences AAZ59944-Z59951
CC represent reverse transcriptase-PCR (RT-PCR) primers used to amplify 4
CC cDNA hybridisation probes from SH-SY5Y-AH1861 human neuroblastoma cell
CC total RNA. The probes were used in Northern blot analysis of gene
CC expression in control and ethanol-treated SH-SY5Y-AH1861 cells in an
CC exemplification of the present invention. The genes whose expression was
CC analysed were dopamine beta-hydroxylase (DBH) and sodium- dependent
CC norepinephrine transporter (NET), both of which are involved in
CC norepinephrine metabolism; delta-like protein (DLK); and monocyte
CC chemoattractant peptide 1 (MCP-1). These genes are thought to be
CC important targets of ethanol. Primers AAZ59944-Z59945 were used to
CC generate the dopamine beta-hydroxylase (DBH) probe
XX
SQ Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 400 GTGCAGTCTCCAGTGAG 416
||||||| ||||||||
Db 18 GTGCAGTAGCCAGTGAG 2

RESULT 1496
AAA92148
ID AAA92148 standard; DNA; 20 BP.
XX
AC AAA92148;
XX
DT 04-JAN-2001 (first entry)
XX
DE Human Lhx3 exon 6 PCR primer SEQ ID NO:113.
XX
KW Lhx3; LIM-3; P-LIM; identification; characterisation; diagnosis;
KW chromosome 9; pituitary disease; subtelomeric region; mutation;
KW pituitary trophic hormone gene promoter; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200050868-A2.
XX
PD 31-AUG-2000.
XX
PF 22-FEB-2000; 2000WO-US004424.
XX
PR 22-FEB-1999; 99US-0121110P.
XX
PA (ADRE-) ADVANCED RES & TECHNOLOGY INST.
XX
PI Rhodes SJ, Bridwell JL, Meier BC, Parker GE, Price JR;
PI Showalter AD, Sloop KW;
XX
DR WPI; 2000-594085/56.
XX
PT New isolated nucleic acid encoding mammalian Lhx3 for identifying a human
PT with a disease, disorder, or condition caused by an altered level of
PT expression or binding of Lhx3.
XX
PS Example 6; Page 169; 239pp; English.
XX
CC The present invention describes an isolated nucleic acid (I) encoding a
CC mammalian Lhx3. (I) is used in assays to: (1) detect and quantify the
CC presence and level of expression of Lhx3, Lhx3a or Lhx3b, in a sample;
CC (2) identify a compound that affects expression, the level of expression,
CC or the activity of Lhx3, Lhx3a, or Lhx3b in a cell; (3) identify a
CC compound that affects binding or Lhx3 to nucleic acid or Lhx3 induction
CC of a pituitary trophic hormone gene promoter; (4) identify a human
CC afflicted with a disease, disorder, or condition caused by altered
CC expression of Lhx3 or altered level of binding of Lhx3 to a nucleic acid;
CC and (5) detect a mutation in a Lhx3 allele in a human. The coding region
CC of human Lhx3 has been genomically mapped to the subtelomeric region of
CC chromosome 9. Lhx3 is also known as P-LIM or LIM-3. The present sequence
CC represents a PCR primer used in the amplification of human Lhx3, which is
CC used in an example from the present invention
XX
SQ Sequence 20 BP; 2 A; 4 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 389 CCTCGGATGAGGTGCAG 405
||||| ||||||||||
Db 1 CCTCGTGTGAGGTGCAG 17

RESULT 1497
AAA66884
ID AAA66884 standard; DNA; 20 BP.
XX
AC AAA66884;
XX
DT 09-OCT-2000 (first entry)
XX
DE Dog genomic marker oligonucleotide sequence SEQ ID NO:746.
XX
KW Dog; genome; genomic marker; radiation hybrid map; identification;
KW chromosome location; gene marker; polymorphic microsatellite marker;
KW phenotype; behaviour; pedigree; ss.
XX
OS Canis familiaris.
XX
PN WO200029615-A2.
XX
PD 25-MAY-2000.
XX
PF 15-NOV-1999; 99WO-IB001907.
XX
PR 13-NOV-1998; 98US-0108193P.
XX
PA (CNRS) CNRS CENT NAT RECH SCI.
XX
PI Galibert F, Andre C;
XX
DR WPI; 2000-387821/33.
XX
PT New radiation hybrid map of the dog, Canine familiaris, genome, useful
PT for e.g. identifying genes implicated in phenotypic and behavioral traits
PT or in genetic diseases and for studying dog pedigrees.
XX
PS Claim 1; Page 85; 87pp; English.
XX
CC The present invention describes a radiation hybrid map of the dog (Canine
CC familiaris) genome comprising the genome location of a marker selected
CC from AAA66139 to AAA66942. The radiation hybrid map is useful for
CC identifying and localising dog genes, since it covers approximately 80 %
CC of the dog genome and provides a dense map integrating different types
CC (i.e. Type I and Type II) of markers. The map and the dog genome markers
CC (or complementary sequences) are especially useful to identify genes
CC responsible for phenotypic and behavioural traits in dogs, to identify
CC morbid genes, to analyse diseases and identify implicated genes in such
CC diseases and their alleles, and to study dog pedigrees. They may also be
CC useful for isolating corresponding human gene sequences e.g. genes
CC involved in genetic diseases
XX
SQ Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;

```
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        393 GGATGAGGTGCAGTCTC 409
              ||| |||||||| ||||
Db          4 GGAAGAGGTGCAATCTC 20


RESULT 1498
AAK95171
ID   AAK95171 standard; DNA; 20 BP.
XX
AC   AAK95171;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human cDNA clone-specific primer, SEQ ID NO: 4416.
XX
KW   Human; full length cDNA; cDNA synthesis; oligo-capping; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   EP1130094-A2.
XX
PD   05-SEP-2001.
XX
PF   07-JUL-2000; 2000EP-00114089.
XX
PR   08-JUL-1999;   99JP-00194486.
PR   11-JAN-2000; 2000JP-00118774.
PR   02-MAY-2000; 2000JP-00183765.
XX
PA   (HELI-) HELIX RES INST.
XX
PI   Ota T,  Nishikawa T,  Isogai T,  Hayashi K,  Ishii S,  Kawai Y;
PI   Wakamatsu A,  Sugiyama T,  Nagai K,  Kojima S,  Otsuki T,  Koga H;
XX
DR   WPI; 2001-524255/58.
XX
PT   830 Primers useful for synthesizing full length cDNA clones and their use
PT   in genetic manipulation.
XX
PS   Example 18; Page 132; 1380pp + Sequence Listing; English.
XX
CC   The invention relates to primers for synthesising full length cDNA
CC   clones. 830 cDNA molecules encoding a human protein have been isolated
CC   and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have
CC   been determined. Primers for synthesising the full length cDNA are useful
CC   for clarifying the function of the protein encoded by the cDNA. The full
CC   length clones were obtained by construction of full length enriched cDNA
CC   libraries that were synthesised by the oligo-capping method. The primers
CC   enable the production of the full length cDNA easily without any special
CC   methods. The present sequence is a primer used to amplify a human cDNA
CC   clone provided in the invention
XX
SQ   Sequence 20 BP; 7 A; 3 C; 8 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         19 TGGACAGGAATGCAGAG 35
              |||||||| | ||||||
Db          4 TGGACAGGCAAGCAGAG 20


RESULT 1499
AAH20451/c
ID   AAH20451 standard; DNA; 20 BP.
XX
AC   AAH20451;
XX
DT   30-JUL-2001  (first entry)
XX
DE   L. monocytogenes listeriolysin O variant LLO PCR primer #3.
XX
KW   Transport system; gene therapy; infection; tumor; ss; LLO; PCR primer;
KW   human immune deficiency virus; hemophilia; muscular dystrophy; capsid;
KW   cystic fibrosis; virus-like particle; cell targeting; listeriolysin O.
XX
OS   Listeria monocytogenes.
XX
PN   WO200132851-A2.
XX
PD   10-MAY-2001.
XX
PF   03-NOV-2000; 2000WO-EP010876.
XX
PR   03-NOV-1999;   99DE-01052957.
XX
PA   (ACGT-) ACGT PROGENOMICS AG.
XX
PI   Boehm G,  Rudolph R,  Schmidt U,  Esser D;
XX
DR   WPI; 2001-316433/33.
XX
PT   Transport system for compounds, useful e.g. in gene therapy, comprises
PT   mosaic-like assembly of different protein subunits able to encapsulate
PT   compounds.
XX
PS   Example 11; Page 35; 106pp; German.
XX
CC   This invention describes a novel transport system (A) for molecular
CC   substances (I) containing recombinantly prepared subunits (SU) based on
CC   amino acids (aa) comprising: (i) at least two modified SU with one
CC   difference; and/or (ii) one or more modified SU with at least two
CC   differences; and (iii) (optionally) unmodified SU. The various SU are
CC   combined in a mosaic fashion to form (A) in which (I) can be
CC   encapsulated. (A) Are used to deliver (I) specifically to cells,
CC   particularly DNA to eukaryotic cells for gene therapy, e.g. of infections
CC   by human immune deficiency virus, tumors and a wide range of inherited
CC   diseases such as hemophilia, muscular dystrophy or cystic fibrosis.
CC   Capsids or other virus-like particles can be assembled, simply and in
CC   modular fashion, in vitro, allowing control over stoichiometric
CC   composition. SU can be modified to impart a wide variety of selected
CC   properties, e.g. cell targeting, improved cellular uptake and reduced
CC   immunogenicity. (A) do not require extensive testing to ensure that they
CC   are safe (contrast replication-deficient viruses), also SU can be
CC   prepared in very pure form and are easily labeled fluorescently (for
CC   quality control or localization). This sequence represents a PCR primer
CC   used in the production of a Listeria monocytogenes listeriolysin LLO
CC   variant which is used to illustrate the method of the invention
XX
SQ   Sequence 20 BP; 3 A; 13 C; 3 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        230 GTGGTGGTGGTGGCGGC 246
              | ||||| |||||||||
Db         17 GCGGTGGAGGTGGCGGC 1


RESULT 1500
AAH23201
ID   AAH23201 standard; DNA; 20 BP.
XX
AC   AAH23201;
XX
DT   17-SEP-2001  (first entry)
XX
DE   Human MMIF mRNA inhibiting antisense oligo ISIS #112711.
XX
KW   Macrophage migration inhibitory factor; MMIF; antisense; neurological;
KW   hyperproliferation; nootropic; antihormonal; immunosuppresive; human;
KW   antiinflammatory; cytostatic; ss.
```

XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO200153317-A1.
XX
PD 26-JUL-2001.
XX
PF 16-JAN-2001; 2001WO-US001475.
XX
PR 20-JAN-2000; 2000US-00489869.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Murray SF, Cowsert LM, Wyatt JR;
XX
DR WPI; 2001-451899/48.
XX
PT New antisense compound(s) are useful to inhibit a nucleic acid molecule
PT encoding macrophage migration inhibitory factor.
XX
PS Claim 3; Page 82; 105pp; English.
XX
CC The invention relates to antisense oligonucleotides 8-30 nucleotides in
CC length targeted to a nucleic acid molecule encoding macrophage migration
CC inhibitory factor (MMIF), where the antisense compound specifically
CC hybridizes with and inhibits the expression of MMIF. The antisense
CC nucleotides are useful for the treatment of a disease or condition
CC associated with MMIF such as neurological, hormonal, immune, inflammatory
CC or hyperproliferative disorder. Sequences AAH23191-268 represent chimeric
CC antisense phosphorothioate oligonucleotides used for inhibition of human
CC MMIF mRNA expression
XX
SQ Sequence 20 BP; 7 A; 4 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy         39 GGCAGGAGGACCAGCAG 55
              ||||| |||||||| ||
Db          2 GGCAGAAGGACCAGGAG 18
```

RESULT 1501
AAF99813
ID AAF99813 standard; DNA; 20 BP.
XX
AC AAF99813;
XX
DT 12-JUN-2001 (first entry)
XX
DE Immunostimulatory nucleic acid #929.
XX
KW Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW immunostimulatory; tumour; viral infection; bacterial infection;
KW fungal infection; parasitic infection; cancer; asthma;
KW infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
OS Synthetic.
XX
PN WO200122972-A2.
XX
PD 05-APR-2001.
XX
PF 25-SEP-2000; 2000WO-US026383.
XX
PR 25-SEP-1999; 99US-0156113P.
PR 27-SEP-1999; 99US-0156135P.
PR 23-AUG-2000; 2000US-0227436P.
XX
PA (IOWA) UNIV IOWA RES FOUND.
PA (COLE-) COLEY PHARM GMBH.
XX
PI Krieg AM, Schetter C, Vollmer J;
XX
DR WPI; 2001-273485/28.
XX
PT Vaccinating against tumors, infectious diseases, allergies and asthma
PT using immunostimulatory Py-rich and TG nucleic acids.
XX
PS Claim 101; Page 58; 338pp; English.
XX
CC The present invention relates to a method for stimulating an immune
CC response. The method comprises administering an immunostimulatory nucleic
CC acid to a non-rodent subject in sufficient quantity to stimulate an
CC immune response. The present sequence is one such immunostimulatory
CC nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
CC (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
CC against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
CC and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC haemophilus, campylobacter, clostridium, Escherichia coli and/or
CC staphylococcus), fungal antigens and/or parasitic antigens. The method is
CC also useful for preventing cancer, asthma, infectious disease, allergy or
CC immune deficiency. The present sequence can also be used to redirect a
CC Th2 to a Th1 immune response and to activate immune cells. Note: the
CC present sequence may have a phosphorothioate backbone
XX
SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1547 GCCTTCGGTCTTCGTCG 1563
              ||||||| ||||||| |
Db          1 GCCTTCGATCTTCGTTG 17
```

RESULT 1502
AAH48588/c
ID AAH48588 standard; DNA; 20 BP.
XX
AC AAH48588;
XX
DT 20-SEP-2001 (first entry)
XX
DE Human fascin associated primer SEQ ID 40.
XX
KW Fascin; regulatory sequence; human; dendritic cell; antiviral; tumor;
KW antibacterial; antifungal; antiparasitic; anti-allergic; neurological;
KW immunomodulatory; apoptotic; expression regulator; vaccine; allergen;
KW Creutzfeld-Jakob disease; Alzheimer's disease; gene therapy;
KW autoimmune disease; transplant rejection; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200151631-A2.
XX
PD 19-JUL-2001.
XX
PF 12-JAN-2001; 2001WO-EP000362.
XX
PR 13-JAN-2000; 2000DE-01001169.
PR 02-MAR-2000; 2000DE-01010188.
XX
PA (RESK/) RESKE-KUNZ A.
PA (ROSS/) ROSS X.
PA (ROSS/) ROSS R.
PA (BROS/) BROS M.
XX
PI Reske-Kunz A, Ross X, Ross R, Bros M;
XX
DR WPI; 2001-451858/48.
XX
PT New regulatory sequences from the fascin gene, useful for providing

PT dendritic cell-specific expression of e.g. antigens, e.g. for vaccination
PT against tumors and infections.
XX
PS Claim 1d; Page 105; 117pp; German.
XX
CC This invention describes novel regulatory sequences (A) derived from
CC human fascin that provide specific expression in dendritic cells (DC) and
CC which have antiviral, antibacterial, antifungal, antiparasitic, anti-
CC allergic, neurological, immunomodulatory and apoptotic activity. (A) are
CC used to regulate expression of antigens, immunoregulators, antisense
CC sequences etc. in DC-specific fashion. Recombinant DNA, vectors and host
CC cells that contain (A) are useful: (i) in vaccines against viruses,
CC bacteria, fungi, parasites, tumors, allergens and plaques in Creutzfeld-
CC Jakob and Alzheimer's disease; and (ii) for gene therapy of tumors,
CC allergies, infections, autoimmune diseases and transplant rejection. They
CC can also be provide specific expression of antigens and immunoregulators
CC in DC; for isolation and identification of cell factors and cis-elements
CC from regulatory sequences that mediate DC-specific expression; to
CC determine the degree of maturity of DC and to block transcription
CC factors, by providing binding sites in DC. (A) provide DC-specific
CC expression of nucleic acid under their control, allowing a more specific
CC regulation of the immune response and eliminating the long and laborious
CC purification of DC (since a complete leucocyte population may be
CC transformed), including transformation in vitro. This sequence represents
CC a primer associated with the human fascin gene described in the invention
XX
SQ Sequence 20 BP; 2 A; 4 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 986 AGCCCCAGAACCTGCTC 1002
||||||||||||| || |
Db 17 AGCCCCAGAACCCGCAC 1

RESULT 1503
AAC89128/c
ID AAC89128 standard; DNA; 20 BP.
XX
AC AAC89128;
XX
DT 07-MAR-2001 (first entry)
XX
DE Canine retroviral PCR primer MLVIN5700+.
XX
KW PCR primer; immunosuppressive; cytostatic; gene therapy; retrovirus;
KW canine; autoimmune disease; haematopoietic malignancy; malignant tumour;
KW ss.
XX
OS Unidentified.
XX
PN WO200070024-A2.
XX
PD 23-NOV-2000.
XX
PF 17-MAY-2000; 2000WO-EP004467.
XX
PR 17-MAY-1999; 99EP-00401192.
PR 18-MAY-1999; 99EP-00401199.
XX
PA (FRSA-) ETAB FR DU SANG.
XX
PI Rigal D, Ghernati I, Corbine A, Darlix J;
XX
DR WPI; 2001-016224/02.
XX
PT New infectious retrovirus isolated from a canine cell line, useful for
PT producing medicaments to treat autoimmune diseases, hematopoietic
PT malignancies or malignant tumors and in diagnosis and gene therapy.
XX
PS Claim 31; Fig 11; 131pp; English.
XX
CC The present invention relates to a retrovirus of type C morphology, which
CC sediments in a sucrose gradient at a density of 1.16-1.18 g/l. The
CC retrovirus is infectious for canine cells and belongs to the oncovirinae
CC group. The present sequence is a PCR primer for the retrovirus of the
CC present invention. The retrovirus can be included in pharmaceutical
CC compositions or medicaments to treat autoimmune diseases, haematopoietic
CC malignancies or malignant tumours, especially in humans. The retrovirus
CC can also be used in gene therapy to introduce a transgene into an animal,
CC especially a human
XX
SQ Sequence 20 BP; 3 A; 12 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 226 GAGAGTGGTGGTGGTGG 242
||||| ||||| |||||
Db 20 GAGAGCGGTGGGGGTGG 4

RESULT 1504
AAH76258
ID AAH76258 standard; DNA; 20 BP.
XX
AC AAH76258;
XX
DT 29-OCT-2001 (first entry)
XX
DE Human GABA(A) receptor-associated protein specific primer GABArp-R.
XX
KW Pyrone; gene therapy; antiinflammatory; gene expression; interleukin;
KW hemeoxygenase-1; prostaglandin G/H synthase-2; RANTES; TNF alpha; p78;
KW macrophage inflammatory protein; chemokine; growth regulated protein-1;
KW matrix metalloproteinase-9; migration inhibitory factor-related protein;
KW lyzozyme; GABA(A) receptor-associated protein; interferon; SCO homolog-2;
KW transketolase; adenosine A2a receptor; CD37 antigen properdin P factor;
KW G-protein; Nef-associated factor-1; signal peptidase; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200151480-A1.
XX
PD 19-JUL-2001.
XX
PF 11-JAN-2001; 2001WO-JP000082.
XX
PR 13-JAN-2000; 2000JP-00004989.
PR 03-OCT-2000; 2000JP-00303711.
XX
PA (TAKI) TAKARA SHUZO CO LTD.
XX
PI Enoki T, Yamashita S, Nishimura K, Sagawa H, Kato I;
XX
DR WPI; 2001-514436/56.
XX
PT Agent for correcting gene expression regulation error comprises pyrone
PT compound or dihydroxy compound.
XX
PS Example 6; Page 77; 93pp; Japanese.
XX
CC The invention provides an agent comprising a pyrone compound or dihydroxy
CC compound of specified formulae given in the specification. The agent is
CC used for correcting gene expression regulation errors. Errors in the
CC following genes may be corrected: IL-6, IL-10, hemeoxygenase-1,
CC prostaglandin G/H synthase-2, macrophage inflammatory protein-1-alpha,
CC RANTES, IL-1alpha, IL-1beta, TNF alpha, IL-7 receptor, macrophage
CC inflammatory protein -1beta, liver and activation-regulated chemokine,
CC macrophage-derived chemokine, macrophage inflammatory protein-2-beta,
CC macrophage inflammatory protein-2-alpha, growth regulated protein-1,
CC matrix metalloproteinase-9, migration inhibitory factor-related protein -
CC 8, lyzozyme, GABA(A) receptor-associated protein, interferon-induced 17 -

```
CC   kDa/15-kDa protein, interferon-inducible protein p78, SCO homolog-2,
CC   transketolase, adenosine A2a receptor, CD37 antigen properdin P factor,
CC   regulator of G-protein signaling-2, Nef-associated factor-1, myeloid
CC   leukemia cell differentiation protein-1, signal peptidase complex, and
CC   also side-effects caused by them such as inflammation. Sequences AAH76220
CC   -76280 represent PCR primers used in the course of the invention
XX
SQ   Sequence 20 BP; 2 A; 4 C; 7 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        917 TGTTCCTGTTCCAGCTG 933
              ||||||||  | ||||||
Db          4 TGTTCCTGGTACAGCTG 20


RESULT 1505
AAF80165
ID   AAF80165 standard; DNA; 20 BP.
XX
AC   AAF80165;
XX
DT   11-JUN-2001  (first entry)
XX
DE   PCR primer used to amplify the left-hand GAL7 promoter region.
XX
KW   Heavy chain variable region; llama; Malassezia furfur; dandruff;
KW   hair care; GAL7 promoter; PCR primer; ss.
XX
OS   Unidentified.
XX
PN   WO200119871-A2.
XX
PD   22-MAR-2001.
XX
PF   28-AUG-2000; 2000WO-EP008380.
XX
PR   16-SEP-1999;   99EP-00307356.
XX
PA   (UNIL ) UNILEVER PLC.
PA   (UNIL ) UNILEVER NV.
PA   (HIND-) HINDUSTAN LEVER LTD.
XX
PI   Frenken LGJ,  Van Der Vaart JM;
XX
DR   WPI; 2001-257877/26.
XX
PT   Composition for use in targeting active agent, especially antimicrobial
PT   agent to scalp for treating, preventing dandruff, has active agent
PT   conjugated to antibody capable of binding specifically to Malassezia
PT   furfur.
XX
PS   Example 3; Page 33; 50pp; English.
XX
CC   PCR primers AAF80165-66 were used to amplify the left-hand GAL7 promoter.
CC   The amplified sequence was used to express fusion proteins comprising a
CC   heavy chain variable region of an antibody isolated from llama, which was
CC   immunised with Malassezia furfur. M. furfur has been implicated in
CC   dandruff formation. The heavy chain variable region is conjugated to an
CC   active agent, and used to produce a composition for topical application,
CC   e.g. to the scalp. The topical composition, e.g. hair care products such
CC   as shampoos and conditioners, skin care lotions, shower gels, etc., is
CC   useful for targeting an active agent to a site at which M. furfur is
CC   present for the treatment and prevention of dandruff
XX
SQ   Sequence 20 BP; 8 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1472 GGGAGCGGATCCACAAA 1488
              ||||| ||||||| |||
Db          1 GGGAGAGGATCCAAAAA 17


RESULT 1506
AAF69712/c
ID   AAF69712 standard; DNA; 20 BP.
XX
AC   AAF69712;
XX
DT   18-APR-2001  (first entry)
XX
DE   Human IL4Ralpha gene PCR primer #48.
XX
KW   Polymorphism; human; interleukin 4 receptor-alpha; IL4R-alpha;
KW   allergic disease; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200104270-A1.
XX
PD   18-JAN-2001.
XX
PF   13-JUL-2000; 2000WO-US019094.
XX
PR   13-JUL-1999;   99US-0143435P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Chew A,  Denton RR,  Duda A,  Nandabalan K,  Stephens JC;
PI   Windemuth AK;
XX
DR   WPI; 2001-103078/11.
XX
PT   New isolated polynucleotide useful for the identification of therapeutics
PT   in allergic diseases is new.
XX
PS   Example 1; Page 61; 188pp; English.
XX
CC   The present invention relates to polymorphisms of the human interleukin 4
CC   receptor-alpha gene (IL4R-alpha; see AAF57718 for the reference
CC   sequence). Polynucleotides comprising polymorphic gene variants are
CC   useful for therapeutic purposes. For example, where a patient may benefit
CC   from expression of a particular IL4Ralpha protein isoform, an expression
CC   vector encoding the isoform may be administered to the patient. It may
CC   desirable to decrease or block expression of a particular IL4Ralpha
CC   isogene, which may be done by turning off by transforming a targeted
CC   organ, tissue or cell population with an expression vector that expresses
CC   high levels of untranslatable mRNA for the isogene. Specific therapeutics
CC   identified by these methods may be useful for allergic diseases. The
CC   present sequence is a PCR primer for human IL4R-alpha
XX
SQ   Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        681 CACAGACAACCTTGTGG 697
              |||||||  ||||||||
Db         20 CACAGACCCCCTTGTGG 4


RESULT 1507
ABZ72182/c
ID   ABZ72182 standard; DNA; 20 BP.
XX
AC   ABZ72182;
XX
DT   03-APR-2003  (first entry)
XX
DE   Gene 216 SSCP detection primer SEQ ID NO 154.
```

```
XX
KW   Human; Gene 216; chromosome 20p13-p12; antiasthmatic; anorectic;
KW   antiinflammatory; gastrointestinal; gene therapy; vaccine; asthma;
KW   obesity; inflammatory bowel disease; primer; ss.
XX
OS   Synthetic.
XX
PN   WO200178894-A2.
XX
PD   25-OCT-2001.
XX
PF   13-APR-2001; 2001WO-US012245.
XX
PR   13-APR-2000; 2000US-00548797.
XX
PA   (GENO-) GENOME THERAPEUTICS CORP.
XX
PI   Keith T;
XX
DR   WPI; 2001-639428/73.
XX
PT   Isolated genes (Gene 216) from human chromosome 20p13-p12 and the
PT   proteins they encode, useful for the prevention, diagnosis and treatment
PT   of asthma, obesity and inflammatory bowel disease.
XX
PS   Example 10; Page 149; 520pp; English.
XX
CC   The invention relates to isolated genes (Gene 216) from human chromosome
CC   20p13-p12 and the proteins they encode. The nucleic acids and proteins
CC   may be used in the prevention, diagnosis and treatment of diseases
CC   associated with inappropriate Gene 216 expression. For example, the
CC   nucleic acids (or vectors) and proteins may be used to treat disorders
CC   associated with decreased expression by rectifying mutations or deletions
CC   in a patient's genome that affect the activity of gene 216 by expressing
CC   inactive proteins or to supplement the patients own production of Gene
CC   216 proteins. Additionally, the nucleic acids may be used to produce the
CC   secreted Gene 216 protein, by inserting the nucleic acids into a host
CC   cell and culturing the cell to express the protein. The nucleic acids and
CC   complementary sequences may also be used as DNA probes in diagnostic
CC   assays to detect and quantitate the presence of similar nucleic acid
CC   sequences in samples and therefore which patients may be in need of
CC   restorative therapy. The Gene 216 protein may also be used as antigens in
CC   the production of antibodies against Gene 216 and in assays to identify
CC   modulators of Gene 216 expression and activity. The anti-Gene 216
CC   antibodies and antagonists may also be used to down regulate expression
CC   and activity. The anti-Gene 216 antibodies may also be used as diagnostic
CC   agents for detecting the presence of Gene 216 proteins in samples (e.g.
CC   by enzyme linked immunosorbant assay or ELISA). Disorders that may be
CC   prevented, diagnosed and/or treated by the above methods include, for
CC   example asthma, obesity and inflammatory bowel disease. The present
CC   sequence is that of a Gene 216 related primer used in examples of the
CC   invention. The primers are used in the physical mapping of the gene
CC   (ABZ72067-ABZ72088), polymorphism identifiction using single strand
CC   conformational polymorphism (SSCP) analysis (ABZ72091-ABZ72184),
CC   sequencing (ABZ72185-ABZ72268) and genotyping (ABZ72317-ABZ72362)
XX
SQ   Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        538 CCCATCTTTGACAAGCC 554
              ||| ||| |||||||||
Db         19 CCCTTCTGTGACAAGCC 3


RESULT 1508
ABZ72122
ID   ABZ72122 standard; DNA; 20 BP.
XX
AC   ABZ72122;
XX
DT   03-APR-2003  (first entry)
XX
DE   Gene 216 SSCP detection primer SEQ ID NO 94.
XX
KW   Human; Gene 216; chromosome 20p13-p12; antiasthmatic; anorectic;
KW   antiinflammatory; gastrointestinal; gene therapy; vaccine; asthma;
KW   obesity; inflammatory bowel disease; primer; ss.
XX
OS   Synthetic.
XX
PN   WO200178894-A2.
XX
PD   25-OCT-2001.
XX
PF   13-APR-2001; 2001WO-US012245.
XX
PR   13-APR-2000; 2000US-00548797.
XX
PA   (GENO-) GENOME THERAPEUTICS CORP.
XX
PI   Keith T;
XX
DR   WPI; 2001-639428/73.
XX
PT   Isolated genes (Gene 216) from human chromosome 20p13-p12 and the
PT   proteins they encode, useful for the prevention, diagnosis and treatment
PT   of asthma, obesity and inflammatory bowel disease.
XX
PS   Example 10; Page 149; 520pp; English.
XX
CC   The invention relates to isolated genes (Gene 216) from human chromosome
CC   20p13-p12 and the proteins they encode. The nucleic acids and proteins
CC   may be used in the prevention, diagnosis and treatment of diseases
CC   associated with inappropriate Gene 216 expression. For example, the
CC   nucleic acids (or vectors) and proteins may be used to treat disorders
CC   associated with decreased expression by rectifying mutations or deletions
CC   in a patient's genome that affect the activity of gene 216 by expressing
CC   inactive proteins or to supplement the patients own production of Gene
CC   216 proteins. Additionally, the nucleic acids may be used to produce the
CC   secreted Gene 216 protein, by inserting the nucleic acids into a host
CC   cell and culturing the cell to express the protein. The nucleic acids and
CC   complementary sequences may also be used as DNA probes in diagnostic
CC   assays to detect and quantitate the presence of similar nucleic acid
CC   sequences in samples and therefore which patients may be in need of
CC   restorative therapy. The Gene 216 protein may also be used as antigens in
CC   the production of antibodies against Gene 216 and in assays to identify
CC   modulators of Gene 216 expression and activity. The anti-Gene 216
CC   antibodies and antagonists may also be used to down regulate expression
CC   and activity. The anti-Gene 216 antibodies may also be used as diagnostic
CC   agents for detecting the presence of Gene 216 proteins in samples (e.g.
CC   by enzyme linked immunosorbant assay or ELISA). Disorders that may be
CC   prevented, diagnosed and/or treated by the above methods include, for
CC   example asthma, obesity and inflammatory bowel disease. The present
CC   sequence is that of a Gene 216 related primer used in examples of the
CC   invention. The primers are used in the physical mapping of the gene
CC   (ABZ72067-ABZ72088), polymorphism identifiction using single strand
CC   conformational polymorphism (SSCP) analysis (ABZ72091-ABZ72184),
CC   sequencing (ABZ72185-ABZ72268) and genotyping (ABZ72317-ABZ72362)
XX
SQ   Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        538 CCCATCTTTGACAAGCC 554
              ||| ||| |||||||||
Db          2 CCCTTCTGTGACAAGCC 18


RESULT 1509
ABS71117/c
ID   ABS71117 standard; DNA; 20 BP.
```

XX
AC ABS71117;
XX
DT 27-NOV-2002 (first entry)
XX
DE Rat GPCR ligand Bv8 cDNA PCR primer RBv8-WR2.
XX
KW G-protein coupled receptor; GPCR; ZAQ; human; ZAQC; ZAQT; rat; ZAQ1;
KW rZAQ1; rZAQ2; mouse; I5E receptor; mI5E; GPR73; Bv8 protein;
KW digestive disorder; central nervous system disorder; CNS; diarrhoea;
KW bowel inflammation; constipation; food absorption disorder; nootropic;
KW Alzheimer's disease; Parkinson's disease; schizophrenia; laxative;
KW antiinflammatory; antidiarrhoeic; neuroleptic; neuroprotective; PCR;
KW primer; ss.
XX
OS Rattus sp.
XX
PN WO200262944-A2.
XX
PD 15-AUG-2002.
XX
PF 01-FEB-2002; 2002WO-JP000852.
XX
PR 02-FEB-2001; 2001JP-00026820.
XX
PA (TAKE) TAKEDA CHEM IND LTD.
XX
PI Ohtaki T, Masuda Y, Takatsu Y, Watanabe T, Terao Y, Shintani Y;
PI Hinuma S;
XX
DR WPI; 2002-627537/67.
XX
PT Screening of compounds modifying the binding of G-protein coupled
PT receptor protein ZAQ and related proteins to their ligands for use in
PT treatment and diagnosis of digestive disorders.
XX
PS Example 5; Page 127; 197pp; Japanese.
XX
CC The present invention relates to a screening method for compounds for
CC their ability to modify the binding of G-protein coupled receptor (GPCR)
CC protein ZAQ and related proteins (human ZAQC, human ZAQT, rat ZAQ1
CC (rZAQ1), rZAQ2, human and mouse I5E (mI5E) receptor, and mouse GPR73) to
CC their ligands (the mature form of human, mouse or rat Bv8 protein). The
CC receptor protein and ligand are contacted in the presence or absence of
CC the test compound. The compounds are useful in a drug composition for the
CC treatment, and prevention of digestive and central nervous system (CNS)
CC disorders, including bowel inflammation, diarrhoea, constipation, food
CC absorption disorders, Alzheimer's disease, Parkinson's disease and
CC schizophrenia. The present sequence represents a PCR primer used in the
CC examples of the present invention
XX
SQ Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 862 CTGAAGCAGTACCTGGA 878
||||||||| | |||||
Db 19 CTGAAGCAGGAGCTGGA 3

RESULT 1510
AAH77194/c
ID AAH77194 standard; DNA; 20 BP.
XX
AC AAH77194;
XX
DT 07-AUG-2003 (revised)
DT 24-JAN-2002 (first entry)
XX
DE PCR primer PV3 used to amplify HPV in human cervical cancer cells.
XX
KW Human; cervical cancer; human papilloma virus; PCR primer; PV3; SiHa;
KW HPV; Thermal cycling; AIDS; ss.
XX
OS Human papillomavirus.
XX
PN US6300124-B1.
XX
PD 09-OCT-2001.
XX
PF 02-NOV-1999; 99US-00432012.
XX
PR 02-NOV-1999; 99US-00432012.
XX
PA (MINU) UNIV MINNESOTA.
XX
PI Blumenfeld M, Bar-Cohen A, Cibuzar GT, Schiller P, Arik M;
XX
DR WPI; 2002-009526/01.
XX
PT Microscopic slide temperature control apparatus for medical diagnosis
PT comprises coupling resistive heating element between the connection pads
PT provided at opposing ends of slide.
XX
PS Example 3; Col 27; 25pp; English.
XX
CC The sequence represents PCR primer PV3. The primer was used in the
CC invention to amplify DNA from cells of the stable human cervical cancer
CC cell line SiHa, containing on integrated copy of human papilloma virus
CC (HPV) type 16 per human genome. The invention relates to a novel thermal
CC cycling device for regulating the temperature of a biological sample on a
CC flat substrate. The invention also includes an apparatus comprising the
CC flat substrate for use in the thermal cycling device. The invention is
CC useful for medical diagnosis of diseases such as AIDS, also for
CC amplification of nucleic acids in biological samples. The invention has
CC the advantage that it enhances operatively as the heat resisting element
CC is directly coupled to the microscopic slide, and reduces costs as the
CC use of a heat sink is eliminated. (Updated on 07-AUG-2003 to correct OS
CC field.)
XX
SQ Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1308 CAAGACATACAACTACC 1324
||||||||||| | |||
Db 19 CAAGACATACATCGACC 3

RESULT 1511
AAL46967/c
ID AAL46967 standard; DNA; 20 BP.
XX
AC AAL46967;
XX
DT 30-AUG-2002 (first entry)
XX
DE Rice lesion inhibitor protein Sp17 coding sequence PCR primer #9.
XX
KW Rice; lesion formation inhibition; heat stress; agriculture; Sp17;
KW transgenic; plant; horticulture; PCR; primer; ss.
XX
OS Oryza sativa.
XX
PN WO200233092-A1.
XX
PD 25-APR-2002.
XX
PF 18-OCT-2001; 2001WO-JP009153.
XX
PR 18-OCT-2000; 2000JP-00318557.
XX

```
PA   (NAAG-) NAT INST AGROBIOLOGICAL SCI.
XX
PI   Yano M,  Yamanouchi U;
XX
DR   WPI; 2002-372312/40.
XX
PT   Rice-originated gene, Sp17, that inhibits lesion formation and is
PT   applicable in improving heat stress of plants thus leading to prevention
PT   of lesion formation, for developing new breeds of plants for agriculture
PT   and horticulture.
XX
PS   Example 6; Page 47; 53pp; Japanese.
XX
CC   The present invention provides the protein and coding sequences of rice
CC   lesion formation inhibitor Sp17. The protein improves the heat stress of
CC   the plant, and can be used in the development of new breeds of plants for
CC   agriculture and horticulture. The present sequence is a PCR primer used
CC   to isolate the coding sequence of the invention
XX
SQ   Sequence 20 BP; 1 A; 6 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        379 TCAGCCACGTCCTCGGA 395
              ||||||||| || ||||
Db         20 TCAGCCACGGCCACGGA 4


RESULT 1512
AAS97855
ID   AAS97855 standard; DNA; 20 BP.
XX
AC   AAS97855;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Murine SAC1 gene-specific oligonucleotide PCR primer #422.
XX
KW   Human; mouse; SAC1; carbohydrate; sweetener; ethanol; alcoholism; ss;
KW   obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;
KW   blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;
KW   protein replacement therapy.
XX
OS   Mus sp.
XX
PN   WO200183749-A2.
XX
PD   08-NOV-2001.
XX
PF   25-APR-2001; 2001WO-US013387.
XX
PR   28-APR-2000; 2000US-0200794P.
PR   28-JUL-2000; 2000US-0221419P.
PR   10-NOV-2000; 2000US-0247443P.
XX
PA   (WARN ) WARNER LAMBERT CO.
PA   (MONE-) MONELL CHEM SENSES CENT.
XX
PI   Bachmanov AA,  Beauchamp GK,  Chatterjee A,  De Jong PJ,  Li S,  Li X;
PI   Ohmen JD,  Reed DR,  Ross D,  Tordoff MG;
XX
DR   WPI; 2002-075162/10.
XX
PT   Novel isolated polypeptide comprising variant form of mouse or human SAC1
PT   polypeptide, and is associated with altered preference for carbohydrates
PT   or other sweeteners, useful for preventing obesity, diabetes, alcoholism.
XX
PS   Claim 14; Page 90; 239pp; English.
XX
CC   The invention relates to an isolated polypeptide, comprising a variant
CC   form of mouse or human SAC1 polypeptide. The variant form is associated
CC   with altered preference for carbohydrates, other sweeteners or ethanol.
CC   The polypeptide and its associated DNA sequence can be produced by
CC   recombinant techniques and is useful for preventing obesity, diabetes or
CC   alcoholism associated with SAC1 expression. The sequences are useful in
CC   screening for drugs and sweeteners. Recombinant cell lines and transgenic
CC   embryos may be used in screening for and identifying agents that induce
CC   or repress function of SAC1. Predisposition to diabetes, obesity or
CC   alcoholism can be ascertained by testing any fluid or tissue of a human
CC   (such as blood, pancreas or tongue) for sequence variations of the SAC1
CC   gene. A sequence variation of the SAC1 locus may indicate a
CC   predisposition to diabetes, obesity and/or alcoholism and may provide a
CC   diagnostic mark. The polynucleotide can be detected in a biological
CC   sample by contacting the DNA with a probe to form a hybridisation complex
CC   which is then detected. The sequences represent cDNA encoding human and
CC   mouse SAC1 polypeptides and PCR primers specific for the SCA1 genes
XX
SQ   Sequence 20 BP; 6 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        360 TGGGGAGAGTGACCAGG 376
              |||||| ||| ||||||
Db          1 TGGGGACAGTTACCAGG 17


RESULT 1513
ABN89264
ID   ABN89264 standard; DNA; 20 BP.
XX
AC   ABN89264;
XX
DT   29-AUG-2002  (first entry)
XX
DE   Human Talin antisense phosphorothioate oligonucleotide SEQ ID NO:77.
XX
KW   Human; Talin; antimicrobial; antiinflammatory; cytostatic; inhibitor;
KW   antisense gene therapy; infection; inflammation; Talin inhibitor; tumour;
KW   antisense oligonucleotide; phosphorothioate; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate backbone"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   US6372492-B1.
XX
PD   16-APR-2002.
XX
PF   30-OCT-2000; 2000US-00702251.
XX
PR   30-OCT-2000; 2000US-00702251.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Cowsert LM;
XX
DR   WPI; 2002-470102/50.
XX
PT   New antisense compound useful for inhibiting expression of Talin and for
PT   preventing or delaying infection, inflammation or tumor formation.
```

XX
PS Claim 14; Col 42; 46pp; English.
XX
CC The present invention describes an antisense compound (I), 16 to 30 bases
CC in length targeted to specific base regions of a nucleic acid encoding
CC human Talin. Also described: (a) an antisense compound up to 30 bases in
CC length which inhibits the expression of human Talin; (b) a composition
CC (II) comprising (I) or (a); and (c) inhibiting the expression of human
CC Talin in human cells or tissues comprising contacting the cells or
CC tissues in vitro with (I) or (a). (I) has antimicrobial, antiinflammatory
CC and cytostatic activities, and can be used in antisense gene therapy and
CC as a Talin expression inhibitor. (I) can be used: to inhibit the
CC expression of human Talin in human cells or tissues; to prevent or delay
CC infection, inflammation or tumour formation; and in diagnostics,
CC therapeutics, prophylaxis, and in research reagents and kits. The present
CC sequence represents a human Talin antisense chimeric phosphorothioate
CC oligonucleotide, having 2'-methoxyethyl (2'-MOE) wings of 5 nucleotides
CC at the 5' and 3' ends and a 10 nucleotide deoxy gap in the middle, which
CC is used in an example from the present invention
XX
SQ Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1571 ACTCAGGCAGGCCAGCT 1587
|||| ||||||||| ||
Db 4 ACTCTGGCAGGCCATCT 20

RESULT 1514
ABS78535
ID ABS78535 standard; DNA; 20 BP.
XX
AC ABS78535;
XX
DT 13-DEC-2002 (first entry)
XX
DE Angiogenesis inhibitory oligonucleotide #1019.
XX
KW Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
KW rubeosis; Osler-Webber Syndrome; myocardial angiogenesis;
KW plaque neovascularisation; telangiectasia; haemophiliac joint;
KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
KW scleroderma; hypertrophic scar.
XX
OS Synthetic.
XX
PN WO200253141-A2.
XX
PD 11-JUL-2002.
XX
PF 14-DEC-2001; 2001WO-US048458.
XX
PR 14-DEC-2000; 2000US-0255534P.
XX
PA (COLE-) COLEY PHARM GROUP INC.
XX
PI Bratzler RL;
XX
DR WPI; 2002-566690/60.
XX
PT Inhibiting angiogenesis in a subject, involves administering at least one
PT antiangiogenic nucleic acid molecule to the subject.
XX
PS Claim 2; Page 37; 276pp; English.
XX
CC The invention relates to inhibiting angiogenesis in a subject, comprising
CC administering at least one antiangiogenic nucleic acid molecule. Also
CC included is a kit comprising a first container housing the antiangiogenic
CC nucleic acids, and instructions for administering them to a subject
CC having a condition characterised by unwanted angiogenesis. The method is
CC useful for inhibiting angiogenesis associated with solid tumour growth,
CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
CC rubeosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
CC neovascularisation, telangiectasia, haemophiliac joints, angiofibroma,
CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
CC acid of the invention
XX
SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1547 GCCTTCGGTCTTCGTCG 1563
||||||| ||||||| |
Db 1 GCCTTCGATCTTCGTTG 17

RESULT 1515
ABK41307/c
ID ABK41307 standard; DNA; 20 BP.
XX
AC ABK41307;
XX
DT 21-MAY-2002 (first entry)
XX
DE Human LSR gene biallelic marker upstream PCR primer #2.
XX
KW Human; obesity associated-biallelic marker; ss; LSR; USF2; PCR; primer;
KW drug response; hyperuricaemia; digestive pathology; hypertension; cancer;
KW hepatic function disorder; cardiovascular disease; hyperlipidaemia;
KW insulin disorder; atheromatous disease; cardiac insufficiency; obesity.
XX
OS Homo sapiens.
XX
PN WO200206525-A2.
XX
PD 24-JAN-2002.
XX
PF 28-JUN-2001; 2001WO-IB001477.
XX
PR 18-JUL-2000; 2000US-0219704P.
XX
PA (GEST) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I, Abderrahim H, Bihain B;
XX
DR WPI; 2002-155043/20.
XX
PT Set of novel map-related biallelic markers, preferably located on obesity
PT disorder-associated chromosomal regions on chromosomes 3, 10 and 19,
PT useful, for e.g. detecting statistical correlations between marker allele
PT and a phenotype.
XX
PS Disclosure; Page 307; 311pp; English.
XX
CC The invention relates to a set of novel map-related biallelic markers,
CC preferably located on obesity disorder-associated chromosomal regions on
CC chromosomes 3, 10 and 19. The markers are useful for genotyping or
CC estimating the frequency of an allele in a population, for detecting an
CC association between a genotype or haplotype and a phenotype, e.g. a
CC disease involving drug responses, obesity or disorders related to
CC obesity, such as hyperuricaemia, digestive pathology, hepatic function
CC disorders, cancer, cardiovascular disease, hypertension, hyperlipidaemia,
CC insulin disorders, atheromatous disease and cardiac insufficiency. The
CC markers are useful for detecting a statistical correlation between a
CC biallelic marker allele and a phenotype and/or between a biallelic marker

CC haplotype and a phenotype. Sequences ABK41306-ABK41309 and ABK41328-
CC ABK41331 represent PCR primers used to amplify human LSR gene or USF2
CC gene biallelic markers
XX
SQ Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1417 CGAAATCGGATCTCCGC 1433
|||||| ||||||| ||
Db 20 CGAAATAGGATCTCAGC 4

RESULT 1516
ABQ93162/c
ID ABQ93162 standard; DNA; 20 BP.
XX
AC ABQ93162;
XX
DT 29-AUG-2003 (revised)
DT 21-OCT-2002 (first entry)
XX
DE T. tauschii/wheat D genome microsatellite cfd60 right PCR primer.
XX
KW Microsatellite marker; wheat; D genome; mapping; genotyping;
KW polymorphism; phenotypic trait; QTL; quantitative trait locus;
KW disease-associated gene; development factor; quality factor;
KW resistance factor; wheat product; identification; detection;
KW genetically modified wheat; PCR; primer; ss.
XX
OS Aegilops tauschii.
OS Triticum aestivum.
XX
PN EP1217079-A1.
XX
PD 26-JUN-2002.
XX
PF 22-DEC-2000; 2000EP-00403659.
XX
PR 22-DEC-2000; 2000EP-00403659.
XX
PA (INRG) INRA INST NAT RECH AGRONOMIQUE.
XX
PI Bernard M, Sourdille P, Guyomarch H;
XX
DR WPI; 2002-550410/59.
XX
PT Map of wheat D genome comprising the genome location of a microsatellite
PT marker, useful for e.g. identifying genes responsible for a desired
PT phenotypic trait, especially quantitative trait loci in wheat, and
PT diseases.
XX
PS Claim 4; Page 6; 105pp; English.
XX
CC The invention relates to a map of the bread wheat D genome comprising the
CC genome location of a microsatellite marker selected from a group of 185
CC such markers (ABQ92733-ABQ92917). The invention also encompasses the use
CC of left (ABQ92918-ABQ93102) and right (ABQ93103-ABQ93287) primers to
CC amplify and detect the microsatellite markers, and to identify genes
CC responsible for a phenotypic trait of interest in wheat. Wheat is an
CC allohexaploid species consisting of 3 diploid genomes designated A, B and
CC D, resulting from two successive intercrossings involving at least three
CC different species. The D genome is thought to have been introduced in the
CC most recent intercrossing, between the amphiploid AABB and Triticum
CC tauschii (DD), probably involving only a limited number of genotypes of
CC both species. Due to its polyploid genome, the large size of its genome,
CC and its low level of polymorphism, the genetic mapping of wheat has to
CC date been difficult. Microsatellites are tandemly repeated sequences
CC between one and six nucleotides long, and are very polymorphic in length,
CC mainly due to polymerase slippage during replication. This high degree of
CC polymorphism makes them especially suitable for the genetic mapping of
CC species which show little intraspecies polymorphism, such as wheat. In
CC addition, microsatellites are codominant, and exhibit Mendelian
CC inheritance. The 185 microsatellite markers of the invention are
CC developed from the ancestral diploid donor species Triticum tauschii and
CC map to the wheat D genome, which is less polymorphic than the A or B
CC genomes. These microsatellite markers thus help to overcome some of the
CC problems associated with the genetic mapping of wheat. The wheat D genome
CC map and the microsatellite markers and associated primers of the
CC invention are useful for identifying genes responsible for a phenotypic
CC trait of interest, most notably QTLs (quantitative trait loci). In
CC particular they may be used for analysing genes and alleles implicated in
CC disease and for identifying development factors, quality factors and
CC factors conferring resistance to pathogens and xenobiotics. The
CC microsatellite markers, and associated primers may be also be used in
CC mapping and genotyping diploid and polyploid species of Triticum,
CC particularly Aegilops, Triticum monococcum, Triticum durum, Triticum
CC aestivum, or related species; for identifying cultivars and hybrids of
CC Triticum and related species; to assess whether or not a product
CC comprises wheat or a related species; and to assess whether or not a
CC product comprises genetically modified wheat. The present sequence
CC represents a specifically claimed Triticum tauschii/wheat genome D
CC microsatellite marker right PCR primer of the invention. (Updated on 29-
CC AUG-2003 to standardise OS field)
XX
SQ Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 996 CCTGCTCATCAACGAGA 1012
||||||||||| | ||
Db 20 CCTGCTCATCAAAGTGA 4

RESULT 1517
ABS51129/c
ID ABS51129 standard; DNA; 20 BP.
XX
AC ABS51129;
XX
DT 21-OCT-2002 (first entry)
XX
DE Human NOV8 RTQ-PCR primer #2.
XX
KW Human; NOVX; NOV1; NOV2; NOV3; NOV4; NOV5; NOV6; NOV7; NOV8; NOV9; NOV10;
KW NOV11; NOV12; NOV13; NOVX-associated disorder; cardiomyopathy;
KW atherosclerosis; diabetes; cancer; cell signal processing; AIDS;
KW metabolic pathway; neuro-olfactory system disorder; neoplastic disorder;
KW acquired immunodeficiency syndrome; inflammatory disorder; obesity;
KW anorexia; cancer-associated cachexia; neurodegenerative disorder;
KW immune disorder; graft versus host disease; Crohn's disease;
KW multiple sclerosis; haemophilia; idiopathic thrombocytopenic purpura;
KW infectious disease; bacterial infection; fungal infection; RTQ-PCR; ss;
KW protozoal infection; viral infection; real time quantitative-PCR; primer.
XX
OS Homo sapiens.
XX
PN WO200250277-A2.
XX
PD 27-JUN-2002.
XX
PF 21-DEC-2001; 2001WO-US049519.
XX
PR 21-DEC-2000; 2000US-0257495P.
PR 22-DEC-2000; 2000US-0258171P.
PR 20-FEB-2001; 2001US-0269940P.
PR 08-MAR-2001; 2001US-0274191P.
PR 22-MAR-2001; 2001US-0277826P.
PR 29-MAR-2001; 2001US-0279840P.
PR 11-APR-2001; 2001US-0282981P.
PR 13-APR-2001; 2001US-0283656P.
PR 31-JUL-2001; 2001US-0309247P.

PR 10-AUG-2001; 2001US-0311754P.
PR 17-AUG-2001; 2001US-0313331P.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Alsobrook JP, Tchernev V, Liu X, Spytek KA, Zerhusen B;
PI Patturajan M, Grosse WM, Lepley DM, Burgess CE, Shimkets R;
PI Szekeres E, Vernet CAM, Li L, Casman SJ, Boldog F, Gorman L;
PI Gangolli EA, Fernandes E, Rieger D, Edinger S, Gunther E, Millet I;
PI Sciore P, Ellerman K, Macdougall J, Smithson G;
XX
DR WPI; 2002-508801/54.
XX
PT New NOVX polypeptides and polynucleotides, useful in gene therapy,
PT particularly for treating or preventing cardiomyopathy, atherosclerosis,
PT diabetes, Crohn's disease, hemophilia or cancer in humans.
XX
PS Example 2; Page 254; 391pp; English.
XX
CC The present invention relates to the isolation of novel human proteins
CC referred to as NOVX, and the polynucleotide sequences encoding them. The
CC NOVX proteins of the invention include NOV1-NOV13. NOVX proteins, NOVX
CC nucleic acids and antibodies are useful for treating or preventing a NOVX
CC -associated disorder, or alleviating a pathological state in a subject,
CC particularly humans. Such disorders include cardiomyopathy,
CC atherosclerosis, diabetes, cancer (e.g. adenocarcinoma, lymphoma,
CC prostate cancer, uterus cancer), disorders related to cell signal
CC processing and metabolic pathways, disorders of the neuro-olfactory
CC system (e.g. those induced by trauma, surgery and/or neoplastic
CC disorders), acquired immunodeficiency syndrome (AIDS), inflammatory
CC disorders (e.g. asthma) obesity, anorexia, cancer-associated cachexia,
CC neurodegenerative disorders (e.g. Alzheimer's disease, Parkinson's
CC disease), immune disorders, graft versus host disease, Crohn's disease,
CC multiple sclerosis, haemophilia, idiopathic thrombocytopenic purpura, and
CC infectious diseases (e.g. bacterial, fungal, protozoal or viral
CC infections). The polynucleotide sequences are also useful in gene
CC therapy. The present sequence represents a real time quantitative (RTQ)-
CC PCR primer used in NOVX expression studies
XX
SQ Sequence 20 BP; 10 A; 3 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1240 TTCATCTTCCGTATCTT 1256
||||||||||| || ||
Db 18 TTCATCTTCCGCATTTT 2

RESULT 1518
AAL40400
ID AAL40400 standard; DNA; 20 BP.
XX
AC AAL40400;
XX
DT 19-SEP-2002 (first entry)
XX
DE Mouse caspase 6 antisense inhibition related oligo SEQ ID No 119.
XX
KW Muscular; cytostatic; nootropic; neuroprotective; ophthalmological;
KW antilipaemic; osteopathic; caspase 6; Rieger's syndrome; bone metabolism;
KW ataxia telangiectasia; hyperproliferative disorder; cholesterol disorder;
KW haematopoietic disorder; cancer; neurological; Alzheimer's disease;
KW apoptotic; mouse; murine; ds.
XX
OS Mus musculus.
XX
PN WO200229066-A1.
XX
PD 11-APR-2002.
XX
PF 03-OCT-2001; 2001WO-US030871.
XX
PR 04-OCT-2000; 2000US-00679299.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Brown-Driver VL, Zhang H, Watt AT;
XX
DR WPI; 2002-471315/50.
XX
PT An antisense oligonucleotide of 8 to 50 nucleotides in length that
PT inhibits caspase 6, is useful for treating Rieger's syndrome.
XX
PS Claim 3; Page 92; 141pp; English.
XX
CC The invention relates to an antisense oligonucleotide compound of 8 to 50
CC nucleotides in length that is targeted to a nucleic acid molecule
CC encoding caspase 6, where the oligonucleotide specifically hybridises
CC with and inhibits the expression of caspase 6. The oligonucleotide of the
CC invention specifically hybridises to and inhibits expression of caspase 6
CC in cells or tissues. The oligonucleotides can be administered
CC therapeutically or prophylactically to treat an animal having a disease
CC or condition associated with caspase 6, such as Rieger's syndrome or
CC ataxia telangiectasia, hyperproliferative disorder, a haematopoietic
CC disorder, a bone metabolism or cholesterol disorder, various types of
CC cancer, neurological conditions such as Alzheimer's disease and other de-
CC regulated apoptotic pathological conditions. This polynucleotide sequence
CC represents a mouse caspase 6 oligonucleotide relating to the invention.
CC NOTE: This phosphorothioate oligonucleotide sequence has 2'-MOE wings and
CC a deoxy gap
XX
SQ Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 211 CAGATAGGCCTGGATGA 227
| || ||||||||||||
Db 3 CCGACAGGCCTGGATGA 19

RESULT 1519
ABS73952
ID ABS73952 standard; DNA; 20 BP.
XX
AC ABS73952;
XX
DT 06-DEC-2002 (first entry)
XX
DE Human cytohesin-1 3' UTR antisense oligonucleotide, ISIS#111045.
XX
KW Human; antisense; cytohesin-1; guanine nucleotide exchange protein; ARF;
KW ADP ribosylation factor; inflammation; antiinflammatory; tumour;
KW cytostatic; ss.
XX
OS Homo sapiens.
XX
PN WO200268584-A2.
XX
PD 06-SEP-2002.
XX
PF 30-OCT-2001; 2001WO-US047583.
XX
PR 22-FEB-2001; 2001US-00791243.
XX
PA (ISIS-) ISIS PHARM INC.
PA (BOEH) BOEHRINGER INGELHEIM PHARM INC.
XX
PI Bennett CF, Rothlein R, Kishimoto TK, Cowsert LM;
XX
DR WPI; 2002-723198/78.
XX
PT New antisense oligonucleotide encoding human cytohesin-1, useful for

```
PT   preventing or treating a disease or condition associated with cytohesin-1
PT   expression e.g. tumor or inflammation.
XX
PS   Example 15; Page 81; 107pp; English.
XX
CC   The invention relates to a new antisense compound, comprising 8-30
CC   nucleobases targeted to a nucleic acid molecule encoding human cytohesin-
CC   1, specifically hybridises with, and inhibits the expression of, human
CC   cytohesin-1, a guanine nucleotide exchange protein for ARF (ADP
CC   ribosylation factor). The antisense compound may be used in a
CC   pharmaceutical composition for inhibiting the expression of cytohesin-1
CC   in human cells or tissues, and in treating a disease or condition
CC   associated with cytohesin-1 by administering to the human the antisense
CC   compound e.g. tumour or inflammation. The antisense compound is also
CC   useful for diagnostics, therapeutics, prophylaxis and as research
CC   reagents and kits. The present sequence is an antisense oligonucleotide
CC   targeting human cytohesin-1
XX
SQ   Sequence 20 BP; 1 A; 11 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        733 GCACCCTGCACCGCCAT 749
              || |||||||||||| |
Db          4 GCGCCCTGCACCGCCCT 20


RESULT 1520
ABL43708
ID   ABL43708 standard; DNA; 20 BP.
XX
AC   ABL43708;
XX
DT   11-APR-2002  (first entry)
XX
DE   Human chromosome 1p36-35 PCR primer SEQ ID NO:752.
XX
KW   Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW   PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   JP2001321190-A.
XX
PD   20-NOV-2001.
XX
PF   12-MAR-2001; 2001JP-00068285.
XX
PR   10-MAR-2000; 2000JP-00066716.
XX
PA   (RIKA ) RIKAGAKU KENKYUSHO.
PA   (GENO-) GENOTEX YG.
XX
DR   WPI; 2002-144136/19.
XX
PT   Arraying genome clones.
XX
PS   Claim 4; Page 19; 528pp; Japanese.
XX
CC   The present invention describes a method of arraying genome clones. The
CC   method comprises: (a) clones of the genomic libraries contained in
CC   multiwell plates numbered for discrimination are mixed in each of the
CC   multiwell plates; (b) a primer designed based on the chromosome marker
CC   sequence is added to the mixture to carry out an amplification reaction;
CC   (c) a signal corresponding to the marker is detected from the resultant
CC   amplified product to specify the discrimination Nos. of the multiwell
CC   plates containing the clones having said marker sequence; (d) the order
CC   of the markers is changed so that the same discrimination Nos. succeed to
CC   the maximum in the specified discrimination Nos. to array the multiwell
CC   plates; (e) the clones in the multiwell plates of the specified
CC   discrimination Nos. are mixed respectively in each wells of longitudinal
CC   and lateral directions; (f) the mixed clones are cultured and the
CC   resultant cultures are amplified by using the above primer; (g) signals
CC   are detected from the amplified products; (h) the clones in the multiwell
CC   plates are specified from the detected result; and (i) the clones are
CC   reconstituted as the positions on the chromosome and arrayed. The
CC   microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC   PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC   represent PCR primers for human chromosome 21q22.1, which are
CC   specifically claimed for use in the present invention
XX
SQ   Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        479 CACTACCAGCTGACATC 495
              ||||||| ||||||  |
Db          2 CACTACCATCTGACAGC 18


RESULT 1521
AAD37172/c
ID   AAD37172 standard; DNA; 20 BP.
XX
AC   AAD37172;
XX
DT   21-AUG-2002  (first entry)
XX
DE   Human MEKK4 antisense oligonucleotide, ISIS #123107.
XX
KW   Human; MEKK4 modulation; mitogen-activated protein kinase kinase 4; MTK1;
KW   MAP3K4; MAP three kinase 1; MAP/ERK kinase kinase 4; MAPKKK4; cytostatic;
KW   prophylaxis; immunological; hyperproliferative disorder; cancer; therapy;
KW   antisense; inflammatory; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotides"
FT   modified_base   6
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   7
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   12
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   15
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotides"
FT   modified_base   18
FT                   /*tag=  h
FT                   /mod_base= m5c
FT   modified_base   20
FT                   /*tag=  i
FT                   /mod_base= m5c
XX
PN   WO200227033-A1.
XX
```

PD 04-APR-2002.
XX
PF 28-SEP-2001; 2001WO-US030549.
XX
PR 29-SEP-2000; 2000US-00676436.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Ward DT, Gaarde WA, Monia BP, Wyatt JR;
XX
DR WPI; 2002-416486/44.
XX
PT New antisense compound targeted to nucleic acid encoding mitogen-
PT activated protein kinase 4, useful for treating immunologic disorder,
PT inflammatory disorder or cancer.
XX
PS Claim 3; Page 92; 132pp; English.
XX
CC The present invention relates to antisense compounds, compositions and
CC methods for modulating the expression of MEKK4 (also referred as mitogen-
CC activated protein kinase kinase 4; MAP3K4; MAP three kinase 1; MAP/ERK
CC kinase kinase 4; MAPKKK4; MTK1). The antisense oligos are useful for
CC inhibiting the expression of MEKK4 in cells or tissues. They are also
CC useful for treating an animal having a disease or condition associated
CC with MEKK4 such as immunological, inflammatory, hyperproliferative
CC disorder or cancer. Sequences of the invention are also useful for
CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
CC They are also useful in antisense therapy. The present sequence is an
CC antisense oligonucleotide targetted to human MEKK4 DNA. This sequence is
CC used in the exemplification of the invention
XX
SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 150 GCAGCTGTCAATGACAC 166
|||| |||||| |||||
Db 18 GCAGTTGTCAAGGACAC 2

RESULT 1522
ABT06434/c
ID ABT06434 standard; DNA; 20 BP.
XX
AC ABT06434;
XX
DT 07-NOV-2002 (first entry)
XX
DE Cyclin 14-3-3 sigma gene PCR primer #14.
XX
KW Human; methylated gene; methylation; breast cancer; marker; WT-1;
KW cell proliferative disorder; TWIST; HOXA5; NES-1; RARbeta; cyclin D2;
KW retinoic acid receptor beta; oestrogen receptor; Wilms' tumour;
KW 14.3.3 sigma; HIN-1; RASSF1A; tumour suppressor gene; hypermethylation;
KW PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200259347-A2.
XX
PD 01-AUG-2002.
XX
PF 28-JAN-2002; 2002WO-US002455.
XX
PR 26-JAN-2001; 2001US-00771357.
XX
PA (UYJO) UNIV JOHNS HOPKINS SCHOOL MEDICINE.
XX
PI Sukumar S, Evron E, Dooley WC, Sacchi N, Davidson N, Fackler MJ;
XX
DR WPI; 2002-599803/64.
XX
PT Diagnosing and/or determining a predisposition to a cellular
PT proliferative disorder of breast tissue, in particular breast cancer, by
PT determining the state of methylation of one or more nucleic acids
PT isolated from the subject.
XX
PS Claim 12; Page 46; 115pp; English.
XX
CC The present invention relates to a method of diagnosing a cellular
CC proliferative disorder of breast tissue, which involves determining the
CC state of methylation of one or more nucleic acids isolated from the
CC subject, where the state of methylation of the nucleic acids as compared
CC with a state of methylation from a subject not having the cellular
CC proliferative disorder of breast tissue is indicative of a cellular
CC proliferative disorder of breast tissue in the subject. The nucleic acids
CC may be TWIST, HOXA5, NES-1, retinoic acid receptor beta (RARbeta),
CC oestrogen receptor, cyclin D2, Wilms' tumour gene (WT-1), 14.3.3 sigma,
CC HIN-1 or RASSF1A. The method is useful for diagnosing and/or determining
CC a predisposition to a cellular proliferative disorder, in particular
CC breast cancer including ductal carcinoma in situ, lobular carcinoma,
CC colloid carcinoma, tubular carcinoma, medullary carcinoma, metaplastic
CC carcinoma, intraductal carcinoma in situ, lobular carcinoma in situ and
CC papillary carcinoma in situ. The present sequence is a primer used in the
CC exemplification of the invention
XX
SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 843 TGAGTACCTGGACAAGG 859
|||||||| ||| ||||
Db 18 TGAGTACCGGGAGAAGG 2

RESULT 1523
ABZ30969
ID ABZ30969 standard; DNA; 20 BP.
XX
AC ABZ30969;
XX
DT 30-JAN-2003 (first entry)
XX
DE Candida albicans GRACE strain PCR primer SEQ ID NO 5188.
XX
KW Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis;
KW signal transduction; DNA replication; cell division; growth;
KW proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.
XX
OS Candida albicans.
XX
PN WO200253728-A2.
XX
PD 11-JUL-2002.
XX
PF 26-DEC-2001; 2001WO-US049486.
XX
PR 29-DEC-2000; 2000US-0259128P.
PR 20-FEB-2001; 2001US-00792024.
PR 22-AUG-2001; 2001US-0314050P.
XX
PA (ELIT-) ELITRA PHARM INC.
XX
PI Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KL;
XX
DR WPI; 2002-566694/60.
XX
PT Constructing strains for identifying gene products as effective targets
PT for therapeutic intervention, by inactivating in the strain one allele of
PT a gene and placing other allele of the gene under conditional expression.
XX
PS Claim 36; SEQ ID NO 5188; 167pp + Sequence Listing; English.

XX
CC The invention relates to constructing (M1) a strain of diploid fungal
CC cells in which both alleles of a gene are modified, comprising modifying
CC one allele by insertion or replacement by a cassette having an
CC expressible selectable marker and modifying other allele by
CC recombination, of a promoter replacement fragment with a heterologous
CC promoter, so that expression of the second allele is regulated by the
CC promoter. (M1) is useful for constructing a strain of diploid fungal
CC cells in which both alleles of a gene are modified. The diploid fungal
CC cells having both alleles modified are useful for identifying a gene that
CC is essential to the survival or growth of a fungus, a gene that
CC contributes to the virulence and/or pathogenicity of a fungus, a gene
CC that contributes to the resistance of a diploid fungus to an antifungal
CC agent, an antifungal agent that inhibits the growth of a diploid fungus
CC and for identifying a therapeutic agent for treatment of a mammalian
CC disease. (M1) is useful for identifying a compound which modulates the
CC activity of a gene product, preferably enzymatic activity, carbon
CC compound catabolism, biosynthetic, transporter, transcriptional,
CC translational, signal transduction, DNA replication and cell division
CC activity. The method is useful for identifying a compound having the
CC ability to inhibit growth or proliferation of C. albicans cells and for
CC treating infection by C. albicans. The present sequence is that of a PCR
CC primer used in the method of the invention. Note: The sequence data for
CC this patent is not represented in the printed specification but is based
CC on sequence information supplied to Derwent by the European Patent Office
XX
SQ Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1717 CTGAGCCATGTTCACCT 1733
||||||| ||| |||||
Db 4 CTGAGCCTTGTGCACCT 20

RESULT 1524
ABZ31379
ID ABZ31379 standard; DNA; 20 BP.
XX
AC ABZ31379;
XX
DT 30-JAN-2003 (first entry)
XX
DE Candida albicans GRACE strain PCR primer SEQ ID NO 5598.
XX
KW Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis;
KW signal transduction; DNA replication; cell division; growth;
KW proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.
XX
OS Candida albicans.
XX
PN WO200253728-A2.
XX
PD 11-JUL-2002.
XX
PF 26-DEC-2001; 2001WO-US049486.
XX
PR 29-DEC-2000; 2000US-0259128P.
PR 20-FEB-2001; 2001US-00792024.
PR 22-AUG-2001; 2001US-0314050P.
XX
PA (ELIT-) ELITRA PHARM INC.
XX
PI Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KL;
XX
DR WPI; 2002-566694/60.
XX
PT Constructing strains for identifying gene products as effective targets
PT for therapeutic intervention, by inactivating in the strain one allele of
PT a gene and placing other allele of the gene under conditional expression.
XX
PS Claim 36; SEQ ID NO 5598; 167pp + Sequence Listing; English.
XX
CC The invention relates to constructing (M1) a strain of diploid fungal
CC cells in which both alleles of a gene are modified, comprising modifying
CC one allele by insertion or replacement by a cassette having an
CC expressible selectable marker and modifying other allele by
CC recombination, of a promoter replacement fragment with a heterologous
CC promoter, so that expression of the second allele is regulated by the
CC promoter. (M1) is useful for constructing a strain of diploid fungal
CC cells in which both alleles of a gene are modified. The diploid fungal
CC cells having both alleles modified are useful for identifying a gene that
CC is essential to the survival or growth of a fungus, a gene that
CC contributes to the virulence and/or pathogenicity of a fungus, a gene
CC that contributes to the resistance of a diploid fungus to an antifungal
CC agent, an antifungal agent that inhibits the growth of a diploid fungus
CC and for identifying a therapeutic agent for treatment of a mammalian
CC disease. (M1) is useful for identifying a compound which modulates the
CC activity of a gene product, preferably enzymatic activity, carbon
CC compound catabolism, biosynthetic, transporter, transcriptional,
CC translational, signal transduction, DNA replication and cell division
CC activity. The method is useful for identifying a compound having the
CC ability to inhibit growth or proliferation of C. albicans cells and for
CC treating infection by C. albicans. The present sequence is that of a PCR
CC primer used in the method of the invention. Note: The sequence data for
CC this patent is not represented in the printed specification but is based
CC on sequence information supplied to Derwent by the European Patent Office
XX
SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1335 AGCCGAGGCCCTTTTGA 1351
|||||| ||||||| ||
Db 1 AGCCGATGCCCTTTGGA 17

RESULT 1525
ABK31851
ID ABK31851 standard; DNA; 20 BP.
XX
AC ABK31851;
XX
DT 29-AUG-2003 (revised)
DT 23-APR-2002 (first entry)
XX
DE Candida tropicalis CYP52A5A/CYP52A5B gene QC-RT-PCR primer 7581-97-F.
XX
KW CPRA; CPRB; CYP52A1A; CYP52A2A; CYP52A2B; CYP52A3A; CYP52A3B; CYP52A5A;
KW CYP52A5B; CYP52A8A; CYP52A8B; CYP52D4A; URA3A; cytochrome P450;
KW NADPH2 reductase; omega-hydroxylase complex; dicarboxylic acid; ss;
KW quantitative competitive reverse transcription PCR; QC-RT-PCR; primer.
XX
OS Candida tropicalis; 20336.
XX
PN US6331420-B1.
XX
PD 18-DEC-2001.
XX
PF 30-APR-1999; 99US-00302620.
XX
PR 01-MAY-1998; 98US-0083798P.
PR 05-OCT-1998; 98US-0103099P.
PR 10-MAR-1999; 99US-0123555P.
XX
PA (WILS/) WILSON C R.
PA (CRAF/) CRAFT D L.
PA (EIRI/) EIRICH L D.
PA (ESHO/) ESHOO M.
PA (MADD/) MADDURI K M.
PA (CORN/) CORNETT C A.
PA (BREN/) BRENNER A A.

PA (TANG/) TANG M.
PA (LOPE/) LOPER J C.
PA (GLEE/) GLEESON M.
XX
PI Wilson CR, Craft DL, Eirich LD, Eshoo M, Madduri KM, Cornett CA;
PI Brenner AA, Tang M, Loper JC, Gleeson M;
XX
DR WPI; 2002-138383/18.
XX
PT Novel isolated nucleic acid encoding cytochrome P450 and NADPH reductase
PT enzymes of omega-hydroxylase complex of Candida tropicalis, useful for
PT increasing production of dicarboxylic acids.
XX
PS Example 11; Col 35-36; 173pp; English.
XX
CC The present invention relates to the isolation of Candida tropicalis
CC 20336 novel genes (CPRA, CPRB, CYP52A1A, CYP52A2A, CYP52A2B, CYP52A3A,
CC CYP52A3B, CYP52A5A, CYP52A5B, CYP52A8A, CYP52A8B, CYP52D4A and URA3A)
CC which encode cytochrome P450 and NADPH2 reductase enzymes of the omega-
CC hydroxylase complex. Also disclosed are vectors containing these genes
CC and methods of producing these enzymes. The genes and vectors are useful
CC for increasing production of a dicarboxylic acid by providing a host cell
CC having a naturally occurring number of the genes of the invention and
CC increasing in the host cell, the number of genes encoding these enzymes.
CC ABK31841-ABK31884 represent quantitative competitive reverse
CC transcription PCR (QC-RT-PCR) primers used in the methods of the present
CC invention. (Updated on 29-AUG-2003 to standardise OS field)
XX
SQ Sequence 20 BP; 7 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1010 AGAGGGGAGAGCTCAAG 1026
||||||||||||||||
Db 2 AGAGGGCAGGGCTCAAG 18

RESULT 1526
ABK16359/c
ID ABK16359 standard; DNA; 20 BP.
XX
AC ABK16359;
XX
DT 14-MAR-2002 (first entry)
XX
DE Mouse adipose protein, adp, PCR primer #4.
XX
KW Adipose protein; ss; adp; obesity; transgenic animal; obesity;
KW adipositas; bulimia; wasting; cachexia; eating disorder;
KW body weight disorder; weight loss; cancer; infectious disease;
KW hypogonadism; Prader-Willi syndrome; Laurence-Moon-Biedl syndrome;
KW hypothyroidism; diabetes; Cushing's syndrome; endocrine disorder;
KW gastrointestinal diseases; inflammatory bowel disease; PCR primer;
KW ulcerative colitis; anorexia nervosa; glycogen storage disease;
KW lipid storage disease; lipoma; liposarcoma; heart disease; hypertension;
KW infertility; acquired immunodeficiency syndrome; AIDS.
XX
OS Mus musculus.
XX
PN WO200196371-A2.
XX
PD 20-DEC-2001.
XX
PF 13-JUN-2001; 2001WO-EP006713.
XX
PR 16-JUN-2000; 2000US-0211914P.
PR 23-JUN-2000; 2000EP-00113049.
PR 28-JUN-2000; 2000US-0214518P.
PR 17-APR-2001; 2001EP-00109537.
XX
PA (DEVE-) DEVELOGEN AG.
XX
PI Broenner G, Ciossek T, Dohrmann C, Haeder T, Rothe M;
XX
DR WPI; 2002-106464/14.
XX
PT Novel nucleic acid encoding adipose polypeptide which regulates, causes
PT or contributes to obesity, useful for treating obesity, heart disease,
PT hypertension, infertility, and controlling weight loss in cancer
PT patients.
XX
PS Claim 1; Page 158; 188pp; English.
XX
CC The invention relates to a nucleic acid encoding a adipose (ADP)
CC polypeptide which regulates, causes or contributes to obesity in an
CC animal or a human. The polynucleotides, proteins, ant-adp antibodies,
CC modulators of adp activity, adp antisense nucleic acids, expression
CC vectors, adp transgenic animals are useful in the diagnosis and treatment
CC of obesity, adipositas, bulimia, wasting (cachexia), eating disorders
CC and/or disorders of body weight/body mass, weight loss due to cancer or
CC infectious diseases, genetic disorders associated with hypogonadism e.g.
CC Prader-Willi syndrome, Laurence-Moon-Biedl syndrome, hypothyroidism,
CC diabetes, Cushing's syndrome, endocrine disorders, gastrointestinal
CC diseases, inflammatory bowel disease, ulcerative colitis, and anorexia
CC nervosa. They are also useful for treating disorders of body weight/mass
CC e.g. glycogen storage diseases, and lipid storage diseases and for
CC treating lipomas, and/or liposarcomas. The compositions are also useful
CC for treating heart disease, hypertension, and infertility and for
CC treating conditions associated with under weight e.g. enhancing or
CC controlling fertility, controlling weight loss in acquired
CC immunodeficiency syndrome (AIDS) or cancer patients. The present sequence
CC is a PCR primer used to amplify an adp nucleic acid
XX
SQ Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 867 GCAGTACCTGGATGACT 883
|||||||||||||||||
Db 18 GGAGTGCCTGGATGACT 2

RESULT 1527
AAD44838/c
ID AAD44838 standard; DNA; 20 BP.
XX
AC AAD44838;
XX
DT 13-DEC-2002 (first entry)
XX
DE Human raf kinase related antisense oligonucleotide #17.
XX
KW Raf kinase; hyperproliferation; neovascularisation; ocular angiogenesis;
KW therapy; cancer; cytostatic; anti-angiogenic; vascular; ophthalmological;
KW antisense; ss.
XX
OS Unidentified.
XX
PN US6410518-B1.
XX
PD 25-JUN-2002.
XX
PF 18-FEB-2000; 2000US-00506073.
XX
PR 31-MAY-1994; 94US-00250856.
PR 31-MAY-1995; 95WO-US007111.
PR 26-NOV-1996; 96US-00756806.
PR 07-JUL-1997; 97US-00888982.
PR 06-JUL-1998; 98WO-US013961.
PR 28-AUG-1998; 98US-00143214.
XX
PA (ISIS-) ISIS PHARM INC.

```
XX
PI   Monia BP;
XX
DR   WPI; 2002-597918/64.
XX
PT   Treating cancer, angiogenesis or neovascularization by administering
PT   antisense oligonucleotides targeted to human raf sequences.
XX
PS   Disclosure; Col 59; 41pp; English.
XX
CC   The present invention relates to novel antisense oligonucleotides which
CC   are targetted to nucleic acids encoding human raf proteins and capable of
CC   inhibiting raf expression. The invention also relates to methods of
CC   inhibiting hyperproliferation of cells which involves contacting the
CC   hyperproliferating cells with a therapeutically effective amount of an
CC   oligonucleotide of the invention. The method is useful for treating
CC   cancer, angiogenesis or neovascularisation, especially ocular
CC   angiogenesis or neovascularisation. The present DNA sequence is human raf
CC   kinase related antisense oligonucleotide
XX
SQ   Sequence 20 BP; 6 A; 10 C; 0 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1152 TGACATGTGGGGTGTGG 1168
              ||| ||||| |||||||
Db         17 TGAGATGTGTGGTGTGG 1


RESULT 1528
ABA96039
ID   ABA96039 standard; DNA; 20 BP.
XX
AC   ABA96039;
XX
DT   08-APR-2002  (first entry)
XX
DE   Mouse syndecan-1 reverse transcription PCR primer #2.
XX
KW   Smad3; wound healing; fibrosis; antifibrotic; vulnerary; mouse;
KW   PCR primer; reverse transcription; syndecan-1; ss.
XX
OS   Mus sp.
XX
PN   WO200189556-A1.
XX
PD   29-NOV-2001.
XX
PF   19-MAY-2000; 2000WO-US013725.
XX
PR   19-MAY-2000; 2000WO-US013725.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Roberts AB,  Ashcroft GS,  Russo A,  Mitchell JB,  Deng C;
XX
DR   WPI; 2002-075348/10.
XX
PT   Use of Smad3 inhibitors in preparing a medicament for treating or
PT   preventing wounds or fibrosis, or as reagents in assays for screening
PT   compounds for preventing fibrosis and improving of wound healing.
XX
PS   Example; Page 38; 65pp; English.
XX
CC   The sequence represents a mouse syndecan-1 reverse transcription PCR
CC   primer. The invention relates to a novel use of a Smad3 inhibitor in
CC   preparing a medicament to treat or prevent wounds or fibrosis. The
CC   invention has antifibrotic and vulnerary activity. The Smad3 inhibitors
CC   are useful for preventing fibrosis and improving wound healing. The Smad3
CC   protein, polypeptides and peptide fragments are useful for generating
CC   antibodies, as reagents for research purposes, or the identification of
CC   other cellular gene products involved in the regulation of fibrosis and
CC   improvement of wound healing, as reagents in assays for screening for
CC   compounds that can be used in the prevention of fibrosis and improvement
CC   of wound healing, and as pharmaceutical reagents in protecting against
CC   fibrosis and improving wound healing related to Smad3. Compounds that
CC   bind to Smad3 may be used in inhibiting the activity of wild type and/or
CC   mutant Smad3 gene products, in elaborating the biological function of
CC   Smad3, and in identifying compounds that disrupt normal Smad3
CC   interactions
XX
SQ   Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1093 ACACTGTGGTACCGGCC 1109
              ||||||||| ||| |||
Db          1 ACACTGTGGAACCAGCC 17


RESULT 1529
ABQ66488
ID   ABQ66488 standard; DNA; 20 BP.
XX
AC   ABQ66488;
XX
DT   22-AUG-2002  (first entry)
XX
DE   Human cytohesin-1 mRNA levels inhibitor #57.
XX
KW   Cytohesin-1; CT1; inhibit; cytostatic; antiinflammatory; cytostatic;
KW   anti-infective; antisense gene therapy; infection; inflammation; tumour;
KW   human; ss; inhibitor.
XX
OS   Synthetic.
XX
PN   US6383809-B1.
XX
PD   07-MAY-2002.
XX
PF   30-OCT-2000; 2000US-00702246.
XX
PR   30-OCT-2000; 2000US-00702246.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Cowsert LM;
XX
DR   WPI; 2002-478385/51.
XX
PT   New antisense compounds directed against human cytohesin-1, useful for
PT   treating and preventing infection, inflammation and tumors.
XX
PS   Claim 14; Col 41; 40pp; English.
XX
CC   The invention relates to a novel antisense compound of 16-30 nucleotides
CC   targeted to any of 71 specified regions of the sequence that encodes
CC   human cytohesin-1 (CT1), where the compound hybridises and inhibits
CC   expression of human CT1. The compound of the invention has
CC   antiinflammatory, cytostatic, and anti-infective activity. The antisense
CC   compounds may have a use in antisense gene therapy. The antisense
CC   compounds are useful for treating or preventing disorders associated with
CC   expression of human CT1, e.g. infections, inflammation and tumours, and
CC   as research and diagnostic reagents. Sequences ABQ66432-ABQ66511
CC   represent chimeric phosphorothioate oligonucleotides, with 2'-MOE wings
CC   and a deoxy gap. The claimed sequences inhibit production of cytohesin-1
CC   mRNA
XX
SQ   Sequence 20 BP; 1 A; 11 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
```

```
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        733 GCACCCTGCACCGCCAT 749
              || |||||||||||| |
Db          4 GCGCCCTGCACCGCCCT 20


RESULT 1530
ABI95418/c
ID   ABI95418 standard; DNA; 20 BP.
XX
AC   ABI95418;
XX
DT   16-FEB-2002  (first entry)
XX
DE   Capture oligonucleptide Zip ID#2505 oligo #9.
XX
KW   Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW   ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW   infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW   oncogene; tumour suppressor; human papillomavirus; forensic;
KW   environmental monitoring; food industry; feed industry; ss.
XX
OS   Synthetic.
XX
PN   WO200179548-A2.
XX
PD   25-OCT-2001.
XX
PF   04-APR-2001; 2001WO-US010958.
XX
PR   14-APR-2000; 2000US-0197271P.
XX
PA   (CORR ) CORNELL RES FOUND INC.
XX
PI   Barany F,  Zirvi M,  Gerry NP,  Favis R,  Kliman R;
XX
DR   WPI; 2002-034366/04.
XX
PT   Designing capture oligonucleotide probes for use on a support to which
PT   complementary oligonucleotides hybridize with little mismatch.
XX
PS   Example 5; Fig 29; 300pp; English.
XX
CC   The present invention describes a method (M1) for designing capture
CC   oligonucleotide probes (I) for use on a support to which complementary
CC   oligonucleotide probes (II) will hybridise with little mismatch, where
CC   (I) have melting temperatures within a narrow range. The method is useful
CC   for detecting infectious diseases caused by bacterial infectious agents
CC   e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC   infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC   Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus,
CC   Epstein-Barr virus and polio virus, and parasitic infectious agents
CC   selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus
CC   medinesis. The method is also useful for detecting genetic diseases such
CC   as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC   Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC   involved in DNA amplification, replication, recombination or repair, the
CC   cancer is specifically associated with a gene selected from BRCA1 gene,
CC   p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC   method is also used for environmental monitoring, forensics and the food
CC   and feed industry, detecting comprises scanning (using e.g. a scanning
CC   electron microscope and infrared microscope) the support at the
CC   particular sites and identifying if ligation of the oligonucleotide probe
CC   sets occurred and correlating (using a computer) identified ligation to a
CC   presence or absence of the target nucleotide sequences. ABI82074 to
CC   ABI97546 represent oligonucleotide sequences used in the exemplification
CC   of the present invention
XX
SQ   Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;

  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        288 ACTTCGTTCTGCACGGG 304
              | ||||||| |||||||
Db         18 AGTTCGTTCGGCACGGG 2


RESULT 1531
ABI93431/c
ID   ABI93431 standard; DNA; 20 BP.
XX
AC   ABI93431;
XX
DT   15-FEB-2002  (first entry)
XX
DE   Capture oligonucleptide Zip ID#518 oligo #9.
XX
KW   Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW   ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW   infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
KW   oncogene; tumour suppressor; human papillomavirus; forensic;
KW   environmental monitoring; food industry; feed industry; ss.
XX
OS   Synthetic.
XX
PN   WO200179548-A2.
XX
PD   25-OCT-2001.
XX
PF   04-APR-2001; 2001WO-US010958.
XX
PR   14-APR-2000; 2000US-0197271P.
XX
PA   (CORR ) CORNELL RES FOUND INC.
XX
PI   Barany F,  Zirvi M,  Gerry NP,  Favis R,  Kliman R;
XX
DR   WPI; 2002-034366/04.
XX
PT   Designing capture oligonucleotide probes for use on a support to which
PT   complementary oligonucleotides hybridize with little mismatch.
XX
PS   Example 5; Fig 29; 300pp; English.
XX
CC   The present invention describes a method (M1) for designing capture
CC   oligonucleotide probes (I) for use on a support to which complementary
CC   oligonucleotide probes (II) will hybridise with little mismatch, where
CC   (I) have melting temperatures within a narrow range. The method is useful
CC   for detecting infectious diseases caused by bacterial infectious agents
CC   e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC   infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC   Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus,
CC   Epstein-Barr virus and polio virus, and parasitic infectious agents
CC   selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus
CC   medinesis. The method is also useful for detecting genetic diseases such
CC   as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC   Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC   involved in DNA amplification, replication, recombination or repair, the
CC   cancer is specifically associated with a gene selected from BRCA1 gene,
CC   p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC   method is also used for environmental monitoring, forensics and the food
CC   and feed industry, detecting comprises scanning (using e.g. a scanning
CC   electron microscope and infrared microscope) the support at the
CC   particular sites and identifying if ligation of the oligonucleotide probe
CC   sets occurred and correlating (using a computer) identified ligation to a
CC   presence or absence of the target nucleotide sequences. ABI82074 to
CC   ABI97546 represent oligonucleotide sequences used in the exemplification
CC   of the present invention
XX
SQ   Sequence 20 BP; 5 A; 5 C; 8 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
```

```
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        567 CCTCCGTCGTGTCAGCC 583
              ||||||||||  ||||
Db         19 CCTCCGTCGTGCAAGCC 3


RESULT 1532
ABL50712/c
ID   ABL50712 standard; DNA; 20 BP.
XX
AC   ABL50712;
XX
DT   19-JUN-2002  (first entry)
XX
DE   Rat G protein-coupled receptor protein PCR primer SEQ ID NO:67.
XX
KW   Rat; rZAQ1; rZAQ2; G protein-coupled receptor; GPCR; antidiarrheic;
KW   laxative; drug development; digestive organ disease; colitis; diarrhoea;
KW   constipation; malabsorption syndrome; diagnosis; gene therapy;
KW   PCR primer; ss.
XX
OS   Rattus sp.
XX
PN   WO200216607-A1.
XX
PD   28-FEB-2002.
XX
PF   23-AUG-2001; 2001WO-JP007209.
XX
PR   24-AUG-2000; 2000JP-00253862.
XX
PA   (TAKE ) TAKEDA CHEM IND LTD.
XX
PI   Terao Y,  Shintani Y;
XX
DR   WPI; 2002-269361/31.
XX
PT   Human and rat brain-originated G protein-coupled receptor proteins and
PT   encoded DNAs, for developing drugs to treat diseases of the digestive
PT   organs, e.g. colitis, diarrhea, constipation and mal-absorption syndrome.
XX
PS   Example 5; Page 77; 135pp; Japanese.
XX
CC   The present invention describes human and rat brain-originated G protein-
CC   coupled receptor (GPCR) proteins. The GPCR sequences have antidiarrheic
CC   and laxative activities. The GPCR sequences can be used for developing
CC   drugs to treat diseases of the digestive organs, e.g. colitis, diarrhoea,
CC   constipation and malabsorption syndrome, including gene diagnosis and
CC   therapy. The present sequence represents a PCR primer for rat GPCR, which
CC   is used in an example from the present invention
XX
SQ   Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        862 CTGAAGCAGTACCTGGA 878
              ||||||||| | |||||
Db         19 CTGAAGCAGGAGCTGGA 3


RESULT 1533
ADG90527
ID   ADG90527 standard; DNA; 20 BP.
XX
AC   ADG90527;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human talin phosphorothioate antisense oligonucleotide, SEQ ID NO:77.
XX
KW   Human; talin; cellular adhesion; muscle strength; cardiac function;
KW   cardiomyocyte; platelet; prostate; androgen downregulation;
KW   prostate cancer; talin-related disorder;
KW   cellular adhesion-related disorder; expression inhibition;
KW   antisense therapy; phosphorothioate; antisense oligonucleotide; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base
FT                   /note= "This oligonucleotide has a phosphorothioate
FT                   backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5'
FT                   and 3' ends, which are 5 nucleotides in length. Also all
FT                   cytosine nucleotides are 5-methylcytosines"
XX
PN   WO200268446-A1.
XX
PD   06-SEP-2002.
XX
PF   30-OCT-2001; 2001WO-US048435.
XX
PR   22-FEB-2001; 2001US-00791942.
XX
PA   (ISIS-) ISIS PHARM INC.
PA   (BOEH ) BOEHRINGER INGELHEIM PHARM INC.
XX
PI   Bennett CF,  Rothlein R,  Kishimoto TK,  Cowsert LM;
XX
DR   WPI; 2002-691651/74.
XX
PT   New antisense oligonucleotides targeted to nucleic acid molecules
PT   encoding human Talin, useful for inhibiting the expression of human Talin
PT   and for treating a human having a disease or condition associated with
PT   Talin.
XX
PS   Example 15; SEQ ID NO 77; 114pp; English.
XX
CC   Sequences ADG90460-ADG90539 represent phosphorothioate targeted to the
CC   human talin gene, which inhibit its expression. The antisense were
CC   designed to target different regions of human talin RNA, and were
CC   analysed for their effect on talin expression by quantitative real-time
CC   PCR. Talin is a cytoplasmic protein which links cytoskeletal proteins
CC   such as actin, myosin and vinculin to integrins, thereby linking the
CC   extracellular matrix to other cells. It is thought to be involved in the
CC   regulation of cellular adhesion and cell morphology. Talin is highly
CC   expressed in platelets, and may play a role in platelet adhesion as its
CC   subcellular distribution differs between resting non-adhesive platelets
CC   and activated adhesive platelets. It could also play a major role in
CC   determining muscle strength and cardiac function as it has been found to
CC   participate in the transmission of contractile force to the extracellular
CC   matrix in cardiomyocytes, and exhibits mechanical loading-dependent
CC   expression at myotendinous junctions. The expression of talin is
CC   downregulated by androgens in prostate tissues, a phenomenon known to
CC   contribute to the development of prostate cancer. The oligonucleotides of
CC   the invention are useful for diagnosis, prevention and treatment of talin
CC   -related disorders, such as those related to cellular adhesion. The
CC   present sequence represents a human c-Ha-ras phosphorothioate antisense
CC   oligonucleotide used as a positive control in determining optimal
CC   oligonucleotide concentration for a particular cell line.
XX
SQ   Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1571 ACTCAGGCAGGCCAGCT 1587
              |||| |||||||||  ||
Db          4 ACTCTGGCAGGCCATCT 20
```

```
RESULT 1534
ABQ77206/c
ID   ABQ77206 standard; DNA; 20 BP.
XX
AC   ABQ77206;
XX
DT   24-APR-2003  (first entry)
XX
DE   Human ABCC12 exon 22/intron 22 boundary.
XX
KW   Adenosine triphosphate (ATP)-binding cassette transporter subfamily C12;
KW   cystic fibrosis transmembrane conductance regulator; human; CFTR/MRP;
KW   multidrug resistance-like subgroup; somatic gene therapy; ABCC12;
KW   paroxysmal kinesigenic choreoathetosis; cysteinyl leukotriene;
KW   anionic drug; methotrexate; neutral drug; glutathione; glucuronate;
KW   sulphate conjugated drug; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285943-A2.
XX
PD   31-OCT-2002.
XX
PF   05-MAR-2002; 2002WO-EP003320.
XX
PR   05-MAR-2001; 2001US-0272759P.
XX
PA   (AVET ) AVENTIS PHARMA SA.
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Rosier-Montus M,  Prades C,  Arnould-Reguigne I,  Denefle P,  Dean M;
PI   Allikmets R;
XX
DR   WPI; 2003-093101/08.
XX
PT   New ATP-binding cassette transporter gene subfamily C12, ABCC12
PT   polypeptide, useful for preventing or treating paroxysmal kinesigenic
PT   choreoathetosis.
XX
PS   Disclosure; Page 44; 122pp; English.
XX
CC   This invention describes a novel human ABCC12 (adenosine triphosphate
CC   (ATP)-binding cassette transporter gene subfamily C12, i.e. cystic
CC   fibrosis transmembrane conductance regulator/multidrug resistance-like
CC   subgroup (CFTR/MRP) family) polypeptide and its encoding polynucleotides
CC   The polypeptide is useful for screening agonists and antagonist of the
CC   ABCC12 polypeptide. The products of the invention are useful for
CC   screening an active ingredient for preventing and treating paroxysmal
CC   kinesigenic choreoathetosis or pathologies linked to dysfunction of
CC   transport of organic anion transporters such as cysteinyl leukotriene,
CC   anionic drugs, such as methotrexate, neutral drugs conjugated to acidic
CC   ligands, such as glutathione, glucuronate or sulphate conjugated drugs
CC   and can be used for somatic gene therapy. This sequence represents a
CC   region corresponding to an exon/intron boundary from the gene encoding a
CC   human ABCC12 isoform described in the disclosure of the invention
XX
SQ   Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        865 AAGCAGTACCTGGATGA 881
              | ||| ||||||||||
Db         19 AGGCATTACCTGGATGA 3


RESULT 1535
ABX74975
ID   ABX74975 standard; DNA; 20 BP.
XX
AC   ABX74975;
XX
DT   25-MAR-2003  (first entry)
XX
DE   Human gene 216 polymorphism detection PCR primer #32.
XX
KW   Human; mouse; ss; primer; gene 216; antiasthmatic; antiinflammatory;
KW   anorectic; chromosome 20p13-p12; single nucleotide polymorphism; SNP;
KW   gene therapy; respiratory disease; asthma; obesity; PCR;
KW   bronchial hyper-responsiveness; chronic obstructive pulmonary disease;
KW   adult respiratory distress syndrome; inflammatory bowel syndrome.
XX
OS   Homo sapiens.
XX
PN   WO200283077-A2.
XX
PD   24-OCT-2002.
XX
PF   15-APR-2002; 2002WO-US012063.
XX
PR   13-APR-2001; 2001US-00834597.
PR   13-APR-2001; 2001WO-US012245.
XX
PA   (SCHE ) SCHERING CORP.
PA   (GENO-) GENOME THERAPEUTICS CORP.
XX
PI   Keith T,  Little RD,  Van Eerdewegh P,  Dupuis J,  Del Mastro RG;
PI   Simon J,  Allen K,  Pandit S;
XX
DR   WPI; 2003-092960/08.
XX
PT   New isolated gene 216 nucleic acids, useful for diagnosing, preventing or
PT   treating a disorder, such as asthma, bronchial hyper-responsiveness,
PT   chronic obstructive pulmonary disease, obesity or inflammatory bowel
PT   syndrome.
XX
PS   Example 10; Page 155; 650pp; English.
XX
CC   This invention relates to a novel isolated nucleic acid, gene 216,
CC   identified from human chromosome 20p13-p12. The invention also discloses
CC   regions of the 216 gene that contain single nucleotide polymorphisms
CC   (SNP's) which may be used as markers for disease susceptibility or
CC   severity. The nucleotides of the invention may have antiasthmatic,
CC   antiinflammatory or anorectic activities and may be used in gene therapy.
CC   The nucleic acids, antibodies or its fragments are useful for diagnosing,
CC   preventing or treating a disorder, such as respiratory diseases (e.g.
CC   asthma, bronchial hyper-responsiveness, chronic obstructive pulmonary
CC   disease or adult respiratory distress syndrome), obesity, or inflammatory
CC   bowel syndrome. The nucleic acids are also useful for identifying
CC   increased susceptibility of a subject to the disorders mentioned. The
CC   nucleic acids can also be used as primers and templates for the
CC   recombinant production of disorder-associated peptides or polypeptides,
CC   for chromosome and gene mapping, or for tissue distribution studies. The
CC   present sequence represents a gene 216 specific PCR primer used in the
CC   scope of the invention
XX
SQ   Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        538 CCCATCTTTGACAAGCC 554
              ||| ||| |||||||||
Db          2 CCCTTCTGTGACAAGCC 18


RESULT 1536
ABX75035/c
ID   ABX75035 standard; DNA; 20 BP.
XX
AC   ABX75035;
XX
DT   25-MAR-2003  (first entry)
XX
```

```
DE   Human gene 216 polymorphism detection PCR primer #92.
XX
KW   Human; mouse; ss; primer; gene 216; antiasthmatic; antiinflammatory;
KW   anorectic; chromosome 20p13-p12; single nucleotide polymorphism; SNP;
KW   gene therapy; respiratory disease; asthma; obesity; PCR;
KW   bronchial hyper-responsiveness; chronic obstructive pulmonary disease;
KW   adult respiratory distress syndrome; inflammatory bowel syndrome.
XX
OS   Homo sapiens.
XX
PN   WO200283077-A2.
XX
PD   24-OCT-2002.
XX
PF   15-APR-2002; 2002WO-US012063.
XX
PR   13-APR-2001; 2001US-00834597.
PR   13-APR-2001; 2001WO-US012245.
XX
PA   (SCHE ) SCHERING CORP.
PA   (GENO-) GENOME THERAPEUTICS CORP.
XX
PI   Keith T,  Little RD,  Van Eerdewegh P,  Dupuis J,  Del Mastro RG;
PI   Simon J,  Allen K,  Pandit S;
XX
DR   WPI; 2003-092960/08.
XX
PT   New isolated gene 216 nucleic acids, useful for diagnosing, preventing or
PT   treating a disorder, such as asthma, bronchial hyper-responsiveness,
PT   chronic obstructive pulmonary disease, obesity or inflammatory bowel
PT   syndrome.
XX
PS   Example 10; Page 155; 650pp; English.
XX
CC   This invention relates to a novel isolated nucleic acid, gene 216,
CC   identified from human chromosome 20p13-p12. The invention also discloses
CC   regions of the 216 gene that contain single nucleotide polymorphisms
CC   (SNP's) which may be used as markers for disease susceptibility or
CC   severity. The nucleotides of the invention may have antiasthmatic,
CC   antiinflammatory or anorectic activities and may be used in gene therapy.
CC   The nucleic acids, antibodies or its fragments are useful for diagnosing,
CC   preventing or treating a disorder, such as respiratory diseases (e.g.
CC   asthma, bronchial hyper-responsiveness, chronic obstructive pulmonary
CC   disease or adult respiratory distress syndrome), obesity, or inflammatory
CC   bowel syndrome. The nucleic acids are also useful for identifying
CC   increased susceptibility of a subject to the disorders mentioned. The
CC   nucleic acids can also be used as primers and templates for the
CC   recombinant production of disorder-associated peptides or polypeptides,
CC   for chromosome and gene mapping, or for tissue distribution studies. The
CC   present sequence represents a gene 216 specific PCR primer used in the
CC   scope of the invention
XX
SQ   Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        538 CCCATCTTTGACAAGCC 554
              ||| ||| |||||||||
Db         19 CCCTTCTGTGACAAGCC 3


RESULT 1537
AAD55476
ID   AAD55476 standard; DNA; 20 BP.
XX
AC   AAD55476;
XX
DT   07-AUG-2003  (first entry)
XX
DE   Human FGFR-3 antisense oligonucleotide, ISIS #125180.
XX
KW   Human; antisense; fibroblast growth factor receptor 3; prophylaxis;
KW   developmental disorder; hyperproliferative disorder; antisense therapy;
KW   FGFR-3; ACH; JTK4; CEK2; cancer; phosphorothioate; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone; All cytidine residues
FT                    are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2 -methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003023004-A2.
XX
PD   20-MAR-2003.
XX
PF   06-SEP-2002; 2002WO-US028549.
XX
PR   10-SEP-2001; 2001US-00953047.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Wyatt JR;
XX
DR   WPI; 2003-313244/30.
XX
PT   Novel compound targeted to a nucleic acid molecule encoding fibroblast
PT   growth factor receptor 3, useful for inhibiting the expression of the
PT   receptor and for treating an animal having cancer or developmental
PT   disorder.
XX
PS   Example 15; Page 79; 120pp; English.
XX
CC   The invention relates to antisense compounds targetted to a nucleic acid
CC   molecule encoding fibroblast growth factor (FGF) receptor 3 (also known
CC   as FGFR-3, ACH, JTK4 and CEK2) to inhibit its expression. Antisense
CC   compounds of the invention are useful for treating diseases or conditions
CC   associated with FGFR-3 such as developmental disorders or
CC   hyperproliferative disorders, especially cancer of colorectal, bladder,
CC   bone, lung, cervical, breast or skin. They are useful as research
CC   reagents, therapeutics, prophylaxis, kits and diagnostics, and as tools
CC   in differential and/or combinatorial analyses to elucidate expression
CC   patterns of a portion of the genes expressed within cells and tissues.
CC   They are also useful in antisense therapy. The present sequence is an
CC   antisense oligonucleotide targetted to human FGFR-3
XX
SQ   Sequence 20 BP; 4 A; 8 C; 7 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        977 GAGACCTCAAGCCCCAG 993
              |||||| |||||||| |
Db          2 GAGACCCCAAGCCCCTG 18


RESULT 1538
ACF57208/c
ID   ACF57208 standard; DNA; 20 BP.
XX
AC   ACF57208;
XX
```

DT 16-OCT-2003 (first entry)
XX
DE Human LAMA3 reverse PCR primer SEQ ID NO:8.
XX
KW Human; mouse; skin structure; skin; laminin 5 chain gene; LAMA3; LAMB3;
KW LAMC2; extracellular matrix component; matrix metalloproteinase; MMP-1;
KW MMP-2; MMP-3; MMP-9; TIMP-1; TIMP-2; TIMP-3; collagen; PCR primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN JP2002330792-A.
XX
PD 19-NOV-2002.
XX
PF 15-JAN-2002; 2002JP-00006797.
XX
PR 15-JAN-2001; 2001JP-00006952.
XX
PA (SHIS) SHISEIDO CO LTD.
XX
DR WPI; 2003-407328/39.
XX
PT A method and a kit for determination of expression of mRNA or cDNA of a
PT protein participating in the maintenance of skin structure.
XX
PS Claim 1; Page 2; 34pp; Japanese.
XX
CC The present invention describes a method and a kit for determining the
CC expression of mRNA or cDNA of a protein participating in the maintenance
CC of skin structure. The method is quantitative, simple and accurate in the
CC determination of extracellular matrix components of laminin 5 chain genes
CC LAMA3, LAMB3 and LAMC2, matrix metalloproteinases MMP-1, MMP-2, MMP-3 and
CC MMP-9, VII collagen, type I collagen alpha 1 chain, type I collagen alpha
CC 2 chain, type III collagen alpha 1 chain, type IV collagen alpha 1 chain,
CC type IV collagen alpha 2 chain, TIMP-1, TIMP-2 and TIMP-3. ACF57201 to
CC ACF57290 represent PCR primers and probes used in the method of the
CC invention
XX
SQ Sequence 20 BP; 9 A; 7 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1113 TGACATCCTGCTTGGGT 1129
|| | ||||||||||||
Db 20 TGTCTTCCTGCTTGGGT 4

RESULT 1539
ACF05737
ID ACF05737 standard; DNA; 20 BP.
XX
AC ACF05737;
XX
DT 06-NOV-2003 (first entry)
XX
DE FADD antisense PCR primer.
XX
KW FADD; mouse; tumour; marker; diagnosis; prognosis; thyroid; PCR; primer;
KW ss.
XX
OS Mus sp.
XX
PN WO2003056340-A2.
XX
PD 10-JUL-2003.
XX
PF 23-DEC-2002; 2002WO-EP014906.
XX
PR 24-DEC-2001; 2001EP-00403359.
PR 22-OCT-2002; 2002EP-00292619.
XX
PA (INRM) INSERM INST NAT SANTE & RECH MEDICALE.
PA (CNRS) CNRS CENT NAT RECH SCI.
XX
PI Chiocchia G, Tourneur L, Feunteun J, Michiels F, Buzyn A;
XX
DR WPI; 2003-645962/61.
XX
PT Use of Fas associated protein with dead domain, and cellular
PT phosphorylated p38-mitogen activated protein kinases as a biological
PT indicator of tumor status.
XX
PS Example 1; Page 50; 118pp; English.
XX
CC The present sequence is that of an antisense primer for Fas-associated
CC protein with death domain (FADD). Use with the sense primer given in
CC ACF05736 generates a 695 bp product. Semi-quantitative RT-PCR was used to
CC determine levels of FADD RNA in thyroids of gsp transgenic mice during
CC various stages of tumour development. These mice provide models of human
CC thyroid tumours. FADD expression was shown to decrease, in some cases to
CC zero, during tumour development. It therefore provides a marker for the
CC absence of in vivo tumour. FADD proteins are secreted from tumour cells.
CC A low cellular amount and a high extracellular amount of FADD proteins
CC are prognostic of resistance to chmotherapy. The invention provides
CC methods for determining a status of tumour absence/presence, and for
CC prognosis of the resistance of a tumour to chemotherapy on the basis of
CC these findings
XX
SQ Sequence 20 BP; 7 A; 7 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1656 CCACACCCCTCACAGGG 1672
||||| ||||||||||
Db 4 CCACAGTCCTCACAGGG 20

RESULT 1540
ACH03337
ID ACH03337 standard; DNA; 20 BP.
XX
AC ACH03337;
XX
DT 25-SEP-2003 (first entry)
XX
DE Immunostimulatory nucleic acid #972.
XX
KW Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
KW antiulcer; gene therapy; vaccine; non-allergic inflammatory disease;
KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
XX
OS Synthetic.
XX
PN US2003050268-A1.
XX
PD 13-MAR-2003.
XX
PF 29-MAR-2002; 2002US-00112653.
XX
PR 29-MAR-2001; 2001US-0279642P.
XX
PA (KRIE/) KRIEG A M.
PA (BERG/) BERG D J.
XX
PI Krieg AM, Berg DJ;
XX
DR WPI; 2003-521815/49.
XX
PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
PT allergic contact dermatitis, latex dermatitis or inflammatory bowel

```
PT   disease by administering an immunostimulatory nucleic acid.
XX
PS   Disclosure; Page 35; 229pp; English.
XX
CC   The invention describes a method of treating non-allergic inflammatory
CC   disease comprising administering to a subject having or at risk of
CC   developing a non-allergic inflammatory disease an immunostimulatory
CC   nucleic acid for prevention or treatment of the disease. The method is
CC   useful for treating non-allergic inflammatory diseases, such as
CC   psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
CC   inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
CC   This sequence represents an immunostimulatory nucleic acid
XX
SQ   Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1547 GCCTTCGGTCTTCGTCG 1563
              ||||||| ||||||| |
Db          1 GCCTTCGATCTTCGTTG 17


RESULT 1541
ADB37315
ID   ADB37315 standard; DNA; 20 BP.
XX
AC   ADB37315;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Immunostimulatory nucleic acid #929.
XX
KW   ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
KW   hypo-responsive subject; immunostimulatory.
XX
OS   Synthetic.
XX
PN   US2003087848-A1.
XX
PD   08-MAY-2003.
XX
PF   02-FEB-2001; 2001US-00776479.
XX
PR   03-FEB-2000; 2000US-0179991P.
XX
PA   (BRAT/) BRATZLER R L.
PA   (PETE/) PETERSEN D M.
PA   (FOUR/) FOURON Y.
XX
PI   Bratzler RL,  Petersen DM,  Fouron Y;
XX
DR   WPI; 2003-657977/62.
XX
PT   Treating and/or preventing allergy or asthma using an immunostimulatory
PT   nucleic acid alone or in combination with an asthma/allergy medicament.
XX
PS   Disclosure; Page 19; 221pp; English.
XX
CC   The invention relates to a method of treating or preventing allergy or
CC   asthma which comprises administering to a subject a poly-G nucleic acid
CC   in an aerosol formulation. The methods and compositions of the present
CC   invention are useful for diagnosing and/or treating asthma and allergy
CC   especially in a hypo-responsive subject. The present sequence represents
CC   an immunostimulatory nucleic acid of the invention.
XX
SQ   Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1547 GCCTTCGGTCTTCGTCG 1563
              ||||||| ||||||| |
Db          1 GCCTTCGATCTTCGTTG 17


RESULT 1542
ADB90016/c
ID   ADB90016 standard; DNA; 20 BP.
XX
AC   ADB90016;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Antinsense oligonucleotide targeting mouse C3 component, ISIS140104.
XX
KW   Mouse; ss; antisense; complement component C3; inflammation;
KW   septic shock; multiple organ failure; hyperacute organ failure;
KW   autoimmune disorder; CNS inflammation; multiple sclerosis;
KW   atherosclerosis; tumour.
XX
OS   Mus musculus.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone and all cytosines are 5
FT                   -methyl cytosines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotides"
XX
PN   US2003096775-A1.
XX
PD   22-MAY-2003.
XX
PF   23-OCT-2001; 2001US-00001076.
XX
PR   23-OCT-2001; 2001US-00001076.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Graham MJ,  Watt AT;
XX
DR   WPI; 2003-606441/57.
XX
PT   New antisense oligonucleotides targeted to a nucleic acid molecule
PT   encoding complement component C3, useful for treating a disease or
PT   condition associated with complement component C3, e.g. autoimmune
PT   disorder or infection.
XX
PS   Example 16; Page 27; 72pp; English.
XX
CC   The invention relates to a compound 8-50 nucleobases in length targeted
CC   to a nucleic acid molecule encoding complement component C3. The compound
CC   specifically hybridises with the nucleic acid molecule encoding
CC   complement component C3 and inhibits the expression of complement
CC   component C3, or specifically hybridises with at least an 8-nucleobase
CC   portion of an active site on a nucleic acid molecule encoding complement
CC   component C3. Also included are a composition comprising the compound and
CC   a pharmaceutical carrier or diluent, inhibiting the expression of
CC   complement component C3 in cells or tissues (comprising contacting the
CC   cells or tissues with the compound cited above) and treating an animal
CC   having a disease or condition associated with complement component C3
CC   comprising administering to the animal the compound cited above so that
CC   expression of complement component C3 is inhibited. The antisense
CC   compounds are useful for inhibiting the expression of complement
CC   component C3 in cells or tissues, or for treating an animal having a
```

CC disease or condition associated with complement component C3 such as an
CC autoimmune disorder (e.g. multiple sclerosis), an infection, or
CC atherosclerosis, inflammation, septic shock, multiple organ failure,
CC hyperacute organ failure and CNS inflammation. The compounds are also
CC useful as research reagents and diagnostics, in distinguishing functions
CC of various members of a biological pathway, or for preventing or delaying
CC infection, inflammation or tumour formation. The present sequence is an
CC antisense oligonucleotide targeting mouse C3.
XX
SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 391 TCGGATGAGGTGCAGTC 407
|| |||||||||||| |
Db 20 TCAGATGAGGTGCAGGC 4

RESULT 1543
ADB81512
ID ADB81512 standard; DNA; 20 BP.
XX
AC ADB81512;
XX
DT 04-DEC-2003 (first entry)
XX
DE Antisense oligo (SeqID 29) used to inhibit human EIF2C1 DNA.
XX
KW antisense; ss; human; eukaryotic translation initiation factor 2C 1;
KW EIF2C1; Co-eIF2C; eIF2C; Golgi ER protein 95kDa; GERp95; Q99;
KW gene therapy; hyperproliferative disorder;
KW familial hypercholesterolaemia; cancer; polycystic kidney disease;
KW cystic fibrosis; progeriod syndrome; cytostatic; antilipaemic.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1. .20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone, where 1-5 and
FT 16-20 are 2' methoxyethyl nucleotides. All cytidines are
FT 5-methylcytidines"
XX
PN WO2003040321-A2.
XX
PD 15-MAY-2003.
XX
PF 04-NOV-2002; 2002WO-US035324.
XX
PR 08-NOV-2001; 2001US-00007078.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Ward DT, Watt AT;
XX
DR WPI; 2003-449448/42.
XX
PT New compound, having a sequence targeted to a nucleic acid encoding human
PT collapsin response mediator protein 2, useful for preparing a composition
PT for treating hypercholesterolemia or hyperproliferative disorder, e.g.,
PT cancer.
XX
PS Claim 3; Page 76; 120pp; English.
XX
CC This invention relates to novel antisense oligonucleotides that modulate
CC the expression of human eukaryotic translation initiation factor 2C 1
CC (EIF2C1). EIF2C1 is located on chromosome 1p34-35, and is also known as
CC Co-eIF2C, eIF2C, Golgi ER protein 95kDa, GERp95 and Q99. It is an
CC intracellular membrane associated protein thought to be involved in
CC cellular differentiation, such that altered expression of EIF2C1 can
CC affect cell growth, morphology and tumourigenicity. Accordingly,
CC antisense oligonucleotides that inhibit the expression of EIF2C1 in cells
CC or tissues can be used in gene therapy to treat various conditions
CC including hyperproliferative disorders, familial hypercholesterolaemia
CC and cancer, as well as polycystic kidney disease, cystic fibrosis and
CC progeriod syndrome. As such, the oligos of the present invention can be
CC described as having cytostatic and antilipaemic activities. This
CC oligonucleotide sequence is an antisense oligo used to inhibit expression
CC of the human eukaryotic translation initiation factor 2C 1 (EIF2C1) DNA
CC of the invention.
XX
SQ Sequence 20 BP; 3 A; 8 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 568 CTCCGTCGTGTCAGCCT 584
||||||| ||||| |||
Db 1 CTCCGTCATGTCATCCT 17

RESULT 1544
ADB99096
ID ADB99096 standard; DNA; 20 BP.
XX
AC ADB99096;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human retinal pigment epithelial-derived factor (PEDF) PCR primer #1.
XX
KW Human; ss; PCR; retinal pigment epithelial-derived neurotrophic factor;
KW PEDF; tumour; ocular disease; neuronal cell pathology; serine protease;
KW blood coagulation; thrombosis; bacterial infection; parasitic infection;
KW elastosis; vascular disorder; fibrinoid formation; coagulation disorder;
KW arteriosclerosis; ischaemia; arthroses diabetes; emphysema; arthritis;
KW septic shock; lung disease; complement activation; ulcer;
KW ulcerative colitis; pancreatitis; psoriasis; fibrinolytic disease;
KW arthropathy; bone resorption; hypertension; congestive heart failure;
KW cirrhosis; protease allergy; chromosome 17p13.1-pter; primer.
XX
OS Homo sapiens.
XX
PN US2003096750-A1.
XX
PD 22-MAY-2003.
XX
PF 09-AUG-2002; 2002US-00216373.
XX
PR 04-JUN-1992; 92US-00894215.
PR 24-SEP-1992; 92US-00952796.
PR 29-AUG-1995; 95US-00520373.
XX
PA (TOMB/) TOMBRAN-TINK J.
PA (STEE/) STEELE F R.
PA (CHAD/) CHADER G J.
PA (BECE/) BECERRA S P.
PA (JOHN/) JOHNSON L V.
PA (RODR/) RODRIGUEZ I R.
XX
PI Tombran-Tink J, Steele FR, Chader GJ, Becerra SP, Johnson LV;
PI Rodriguez IR;
XX
DR WPI; 2003-743982/70.
XX
PT New purified retinal pigmented epithelium derived neurotrophic factor
PT composition, useful for treating tumors, i.e. retinal tumor, ocular
PT disease, neuronal cell pathologies, coagulation disorders or
PT arteriosclerosis.
XX
PS Example 48; SEQ ID NO 9; 58pp; English.
XX

CC The invention relates to a composition comprising purified retinal
CC pigmented epithelium derived neurotrophic factor (PEDF). The PEDF
CC proteins comprise ADB99089, ADB99090 or sequences equivalent to but not
CC identical to ADB99089. Human PEDF is encoded by ADB99088. Also included
CC are purifying PEDF, producing PEDF comprising expressing the DNA sequence
CC encoding the PEDF in a host cell, a recombinant DNA molecule comprising a
CC genomic DNA fragment for PEDF (appearing as ADB99091 - ADB99093), a
CC vector comprising a PEDF nucleic acid molecule, an organism transformed
CC with a recombinant DNA molecule comprising a retinal PEDF cDNA, a host
CC cell containing the vector, a recombinantly produced PEDF protein which
CC is free from the risks normally associated with proteins isolated or
CC purified from a naturally occurring source organism and a purified human
CC genomic DNA molecule encoding a PEDF protein. The purified retinal
CC pigmented epithelium derived neurotrophic factor is useful for treating
CC tumours, i.e. retinal tumour, ocular disease, neuronal cell pathologies,
CC or conditions resulting from the activity of serine proteases, e.g.
CC excessive or unwanted blood coagulation, thrombosis, bacterial infection,
CC parasitic infection, elastosis, vascular disorders involving fibrinoid
CC formation, coagulation disorders, arteriosclerosis, ischaemia, arthroses
CC diabetes, emphysema, arthritis, septic shock, lung diseases, excessive
CC complement activation, ulcers, ulcerative colitis, pancreatitis,
CC psoriasis, fibrinolytic disease, arthropathy, bone resorption,
CC hypertension, congestive heart failure, cirrhosis, or allergy caused by
CC proteases. The present sequence is a PCR primer used to isolate genomic
CC DNA encoding human retinal pigmented epithelium derived neurotrophic
CC factor (PEDF).
XX
SQ Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1631 CCAGCAGGCAGCGGCTG 1647
              | ||| ||||||||||||
Db          2 CAAGCTGGCAGCGGCTG 18
```

RESULT 1545
ADC65775/c
ID ADC65775 standard; DNA; 20 BP.
XX
AC ADC65775;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human TGF-beta receptor II targeted antisense oligonucleotide #52.
XX
KW human; antisense oligonucleotide;
KW transforming growth factor beta receptor II; TGF-beta receptor II;
KW hyperproliferative disorder; breast cancer; autoimmune disorder;
KW rheumatoid arthritis; 2'-O-methoxyethyl gapmer;
KW phosphorothioate backbone; ss.
XX
OS Homo sapiens.
XX
PN WO2003000656-A2.
XX
PD 03-JAN-2003.
XX
PF 19-JUN-2002; 2002WO-US019665.
XX
PR 21-JUN-2001; 2001US-00888361.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Murray SF, Wyatt JR;
XX
DR WPI; 2003-175279/17.
XX
PT New compound having a sequence targeted to a nucleic acid encoding
PT Transforming growth factor beta-receptor II, useful for preparing a
PT composition for treating hyperproliferative disorder e.g., lung, liver,
PT colon or gastric cancer.
XX
PS Example 15; SEQ ID NO 71; 141pp; English.
XX
CC The invention comprises antisense oligonucleotides that are targeted to
CC the nucleic acid encoding transforming growth factor beta (TGF-beta)
CC receptor II. The antisense oligonucleotides of the invention are useful
CC for treating: hyperproliferative disorders (e.g. breast cancer), or an
CC autoimmune disorder (e.g. rheumatoid arthritis). The present DNA sequence
CC represents a 2'-O-methoxyethyl gapmer oligonucleotide with a
CC phosphorothioate backbone that is targeted to human TGF-beta receptor II.
XX
SQ Sequence 20 BP; 8 A; 4 C; 7 G; 1 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1202 CCCTCTTTCCGGGCTCC 1218
              || |||||| |||||||
Db         19 CCATCTTTCTGGGCTCC 3
```

RESULT 1546
ADC68507
ID ADC68507 standard; DNA; 20 BP.
XX
AC ADC68507;
XX
DT 18-DEC-2003 (first entry)
XX
DE Tannin biosynthesis gene related PCR primer SEQ ID NO:217.
XX
KW Lolium perenne; Festuca arundinacea; lignin; fructan; tannin;
KW biosynthetic pathway; plant; PCR primer; ss.
XX
OS Synthetic.
OS Lolium perenne.
OS Schedonorus arundinaceus.
XX
PN WO2003040306-A2.
XX
PD 15-MAY-2003.
XX
PF 07-NOV-2002; 2002WO-NZ000239.
XX
PR 07-NOV-2001; 2001US-0337703P.
XX
PA (GENE-) GENESIS RES & DEV CORP LTD.
PA (WRIG-) WRIGHTSON SEEDS LTD.
XX
PI Demmer J, Forster RL, Gibson JB, Shenk MA, Norriss MG, Glenn M;
PI Saulsbury KM, Hall C;
XX
DR WPI; 2003-441544/41.
XX
PT New polynucleotide encoding polypeptides from Lolium perenne or Festuca
PT arundinacea, useful for modulating the biosynthesis of lignin, fructan or
PT tannin in a plant.
XX
PS Example 8; SEQ ID NO 217; 240pp; English.
XX
CC The present invention describes isolated polynucleotides (I) encoding
CC proteins (II) from Lolium perenne and Festuca arundinacea which are
CC active in lignin, fructan and tannin biosynthetic pathways. Also
CC described: (1) an isolated oligonucleotide probe or primer comprising at
CC least 10 contiguous residues complementary to 10 contiguous residues of
CC (I); (2) a kit comprising the oligonucleotide probe or primer; (3) a
CC genetic construct comprising (I); (4) a transgenic plant cell comprising
CC the genetic construct of (3); (5) a plant or its seed, fruit or progeny
CC comprising the transgenic plant cell of (4); (6) modulating one or more
CC of the lignin, fructan or tannin compositions of a plant; (7) producing a
CC plant having one or more of the lignin, fructan or tannin compositions;

```
CC   and (8) modifying the activity of (II) involved in a lignin, fructan or
CC   tannin biosynthetic pathway in a plant. (I) can be used for modulating
CC   the biosynthesis of lignin, fructan or tannin in a plant. The present
CC   sequence is used in the exemplification of the present invention.
XX
SQ   Sequence 20 BP; 6 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        851 TGGACAAGGACCTGAAG 867
              ||||||  |||||  ||||
Db          2 TGGACATGGACCAGAAG 18


RESULT 1547
ADC45046
ID   ADC45046 standard; DNA; 20 BP.
XX
AC   ADC45046;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Yeast CYP52A5A/B genes 5' region RT-PCR primer #1.
XX
KW   PCR; Primer; ss; yeast; omega oxygenase complex;
KW   cytochrome P450 monooxygenase; CYP; NADPH reductase enzymes; CPR; CPRA;
KW   CPRB; CYP52A1A; CYP52A2A; CYP52A2B; CYP52A3A; CYP52A3B; CYP52A5A;
KW   CYP52A5B; CYP52A8A; CYP52A8B; CYP52D4A; dicarboxylic acid; diester;
KW   polymer; thermoplastic; plasticising agent; lubricant; hydraulic fluid;
KW   agricultural chemical; pharmaceutical; dye; surfactant; adhesive;
KW   QC-RT-PCR; quantitative competitive reverse transcription PCR.
XX
OS   Candida tropicalis.
XX
PN   US2003049821-A1.
XX
PD   13-MAR-2003.
XX
PF   03-MAY-2002; 2002US-00138838.
XX
PR   01-MAY-1998;   98US-0083798P.
PR   05-OCT-1998;   98US-0103099P.
PR   10-MAR-1999;   99US-0123555P.
PR   30-APR-1999;   99US-00302620.
PR   12-OCT-2001; 2001US-00976800.
XX
PA   (WILS/) WILSON C R.
PA   (CRAF/) CRAFT D L.
PA   (EIRI/) EIRICH L D.
PA   (ESHO/) ESHOO M.
PA   (MADD/) MADDURI K M.
PA   (CORN/) CORNETT C A.
PA   (BREN/) BRENNER A A.
PA   (TANG/) TANG M.
PA   (LOPE/) LOPER J C.
PA   (GLEE/) GLEESON M.
XX
PI   Wilson CR,  Craft DL,  Eirich LD,  Eshoo M,  Madduri KM,  Cornett CA;
PI   Brenner AA,  Tang M,  Loper JC,  Gleeson M;
XX
DR   WPI; 2003-777150/73.
XX
PT   New nucleic acid encoding cytochrome P450 and NADPH reductase enzymes
PT   (e.g. CPRA, CPRB or CYP52A1A), useful for producing dicarboxylic acids
PT   that may be utilized as industrial intermediates in manufacturing
PT   diesters and polymers.
XX
PS   Example 11; SEQ ID NO 47; 196pp; English.
XX
CC   The invention relates to an isolated nucleic acid selected encoding
CC   Candida tropicalis omega oxygenase complex enzymes (cytochrome P450
CC   monooxygenase (CYP) and NADPH reductase enzymes (CPR) designated CPRA,
CC   CPRB, CYP52A1A, CYP52A2A, CYP52A2B, CYP52A3A, CYP52A3B, CYP52A5A,
CC   CYP52A5B, CYP52A8A, CYP52A8B or CYP52D4A) or their coding regions. Also
CC   included are the CPR/CYP proteins, a vector comprising the nucleic acid
CC   cited above, a host cell transfected or transformed with the above
CC   nucleic acid, producing the proteins, discriminating members of a gene
CC   family by quantifying the amount of target mRNA in a sample, increasing
CC   production of a dicarboxylic acid and increasing the production of the
CC   proteins cited above. The host cell is C. tropicalis is specifically
CC   H5343 ura-. The nucleic acid is useful for producing dicarboxylic acids
CC   that may be utilised as industrial intermediates in the manufacture of
CC   diesters and polymers (e.g. as thermoplastics, plasticising agents,
CC   lubricants, hydraulic fluids, agricultural chemicals, pharmaceuticals,
CC   dyes, surfactants or adhesives). The present sequence is a quantitative
CC   competitive reverse transcription (QC-RT) PCR primer used to assay the
CC   levels of CYP, CPR or control POX mRNA in response to exogenously added
CC   substrates.
XX
SQ   Sequence 20 BP; 7 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1010 AGAGGGGAGAGCTCAAG 1026
              ||||||  ||  |||||||
Db          2 AGAGGGCAGGGCTCAAG 18


RESULT 1548
ADC45616
ID   ADC45616 standard; DNA; 20 BP.
XX
AC   ADC45616;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Yeast CYP52A5A/B genes 5' region RT-PCR primer #1.
XX
KW   PCR; Primer; ss; yeast; omega oxygenase complex;
KW   cytochrome P450 monooxygenase; CYP; NADPH reductase enzymes; CPR; CPRA;
KW   CPRB; CYP52A1A; CYP52A2A; CYP52A2B; CYP52A3A; CYP52A3B; CYP52A5A;
KW   CYP52A5B; CYP52A8A; CYP52A8B; CYP52D4A; dicarboxylic acid; diester;
KW   polymer; thermoplastic; plasticising agent; lubricant; hydraulic fluid;
KW   agricultural chemical; pharmaceutical; dye; surfactant; adhesive;
KW   QC-RT-PCR; quantitative competitive reverse transcription PCR.
XX
OS   Candida tropicalis.
XX
PN   US2003049822-A1.
XX
PD   13-MAR-2003.
XX
PF   03-MAY-2002; 2002US-00139031.
XX
PR   01-MAY-1998;   98US-0083798P.
PR   05-OCT-1998;   98US-0103099P.
PR   10-MAR-1999;   99US-0123555P.
PR   30-APR-1999;   99US-00302620.
PR   12-OCT-2001; 2001US-00976800.
XX
PA   (WILS/) WILSON C R.
PA   (CRAF/) CRAFT D L.
PA   (EIRI/) EIRICH L D.
PA   (ESHO/) ESHOO M.
PA   (MADD/) MADDURI K M.
PA   (CORN/) CORNETT C A.
PA   (BREN/) BRENNER A A.
PA   (TANG/) TANG M.
PA   (LOPE/) LOPER J C.
PA   (GLEE/) GLEESON M.
XX
PI   Wilson CR,  Craft DL,  Eirich LD,  Eshoo M,  Madduri KM,  Cornett CA;
```

```
PI   Brenner AA,  Tang M,  Loper JC,  Gleeson M;
XX
DR   WPI; 2003-765370/72.
XX
PT   New nucleic acid encoding cytochrome P450 and NADPH reductase enzymes
PT   (e.g. CPRA, CPRB or CYP52A1A), useful for producing dicarboxylic acids
PT   that may be utilized as industrial intermediates in manufacturing
PT   diesters and polymers.
XX
PS   Example 11; SEQ ID NO 47; 196pp; English.
XX
CC   The invention relates to an isolated nucleic acid selected encoding
CC   Candida tropicalis omega oxygenase complex enzymes (cytochrome P450
CC   monooxygenase (CYP) and NADPH reductase enzymes (CPR) designated CPRA,
CC   CPRB, CYP52A1A, CYP52A2A, CYP52A2B, CYP52A3A, CYP52A3B, CYP52A5A,
CC   CYP52A5B, CYP52A8A, CYP52A8B or CYP52D4A) or their coding regions. Also
CC   included are the CPR/CYP proteins, a vector comprising the nucleic acid
CC   cited above, a host cell transfected or transformed with the above
CC   nucleic acid, producing the proteins, discriminating members of a gene
CC   family by quantifying the amount of target mRNA in a sample, increasing
CC   production of a dicarboxylic acid and increasing the production of the
CC   proteins cited above. The host cell is C. tropicalis is specifically
CC   H5343 ura-. The nucleic acid is useful for producing dicarboxylic acids
CC   that may be utilised as industrial intermediates in the manufacture of
CC   diesters and polymers (e.g. as thermoplastics, plasticising agents,
CC   lubricants, hydraulic fluids, agricultural chemicals, pharmaceuticals,
CC   dyes, surfactants or adhesives). The present sequence is a quantitative
CC   competitive reverse transcription (QC-RT) PCR primer used to assay the
CC   levels of CYP, CPR or control POX mRNA in response to exogenously added
CC   substrates.
XX
SQ   Sequence 20 BP; 7 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1010 AGAGGGGAGAGCTCAAG 1026
              ||||||  || |||||||
Db          2 AGAGGGCAGGGCTCAAG 18


RESULT 1549
ADC35600/c
ID   ADC35600 standard; DNA; 20 BP.
XX
AC   ADC35600;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Human CD81/TAPA-1 antisense oligonucleotide #60.
XX
KW   Antisense; ss; human; CD81; TAPA-1; tetraspanin; viral infection;
KW   cocaine addiction; autoimmune disorder; antiinflammatory; antibacterial;
KW   virucide; antiparasitic; inflammatory disorder; parasitic infection;
KW   bacterial infection.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone and all cytidines are 5
FT                   -methyl cytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotide"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotide"
XX
PN   US2003113914-A1.
XX
PD   19-JUN-2003.
XX
PF   10-DEC-2001; 2001US-00006430.
XX
PR   10-DEC-2001; 2001US-00006430.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Graham MJ,  Dobie K;
XX
DR   WPI; 2003-810907/76.
XX
PT   Novel compound hybridizing with nucleic acid molecule encoding CD81 and
PT   inhibiting the expression of CD81, useful for treating infections and
PT   disease associated with expression of CD81 such as inflammation disorder.
XX
PS   Claim 3; SEQ ID NO 72; 55pp; English.
XX
CC   The invention relates to a compound (antisense oligonucleotide)
CC   hybridising with the eighth nucleobase portion of an active site on a
CC   nucleic acid molecule encoding CD81 (also known as TAPA-1, a tetraspanin)
CC   and inhibiting the expression of CD81. Also included is a composition
CC   comprising the antisense oligonucleotide and a carrier or a diluent. The
CC   antisense oligonucleotide is useful for inhibiting the expression of CD81
CC   in cells or tissues. The antisense oligonucleotide is also useful for
CC   treating infections preferably viral, bacterial and parasitic and
CC   diseases such as inflammatory disorders and autoimmune disorders. The
CC   disease or condition is characterised by chemical dependency (e.g.
CC   cocaine addiction). The present sequence is a CD81 antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 6 A; 4 C; 8 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1700 ACTCTCTGCCTACCTGC 1716
              ||||||||||| | |||
Db         17 ACTCTCTGCCTTCATGC 1


RESULT 1550
ADC84236
ID   ADC84236 standard; DNA; 20 BP.
XX
AC   ADC84236;
XX
DT   01-JAN-2004  (first entry)
XX
DE   Human papillomavirus type 6 (HPV 6) detection oligonucleotide #2.
XX
KW   probe; human papilloma virus; HPV; detection; identification; ss.
XX
OS   Human papillomavirus type 6.
XX
PN   EP1302550-A1.
XX
PD   16-APR-2003.
XX
PF   10-OCT-2001; 2001EP-00123379.
XX
PR   10-OCT-2001; 2001EP-00123379.
XX
PA   (KING-) KING CAR FOOD IND CO LTD.
XX
PI   Lin C,  Lin R,  You C,  Huang H,  Lee B,  Lee H,  Lin Y,  Fan C;
PI   Hsu H,  Shih C,  Yeh C,  Kao Y,  Pan C,  Chan P;
XX
DR   WPI; 2003-432398/41.
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```
XX
PT   Detector for identifying human papilloma virus subtypes, comprises
PT   carrier having two parts carrying first and second oligonucleotides that
PT   respectively hybridize with DNA contained in first and second subtypes of
PT   the virus.
XX
PS   Claim 4; SEQ ID NO 466; 221pp; English.
XX
CC   The invention comprises oligonucleotides for detecting and identifying
CC   subtypes of human papilloma virus (HPV) contained in a sample. The
CC   oligonucleotides of the invention are useful for simultaneously detecting
CC   and identifying subtypes of HPVs. The present DNA sequence represents an
CC   HPV detection oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 6 A; 7 C; 1 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1677 CCCCAACTACATCTTCC 1693
              ||  |||||||||||||
Db          3 CCGTAACTACATCTTCC 19


RESULT 1551
ADC84235
ID   ADC84235 standard; DNA; 20 BP.
XX
AC   ADC84235;
XX
DT   01-JAN-2004  (first entry)
XX
DE   Human papillomavirus type 6 (HPV 6) detection oligonucleotide #1.
XX
KW   probe; human papilloma virus; HPV; detection; identification; ss.
XX
OS   Human papillomavirus type 6.
XX
PN   EP1302550-A1.
XX
PD   16-APR-2003.
XX
PF   10-OCT-2001; 2001EP-00123379.
XX
PR   10-OCT-2001; 2001EP-00123379.
XX
PA   (KING-) KING CAR FOOD IND CO LTD.
XX
PI   Lin C,  Lin R,  You C,  Huang H,  Lee B,  Lee H,  Lin Y,  Fan C;
PI   Hsu H,  Shih C,  Yeh C,  Kao Y,  Pan C,  Chan P;
XX
DR   WPI; 2003-432398/41.
XX
PT   Detector for identifying human papilloma virus subtypes, comprises
PT   carrier having two parts carrying first and second oligonucleotides that
PT   respectively hybridize with DNA contained in first and second subtypes of
PT   the virus.
XX
PS   Claim 4; SEQ ID NO 465; 221pp; English.
XX
CC   The invention comprises oligonucleotides for detecting and identifying
CC   subtypes of human papilloma virus (HPV) contained in a sample. The
CC   oligonucleotides of the invention are useful for simultaneously detecting
CC   and identifying subtypes of HPVs. The present DNA sequence represents an
CC   HPV detection oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 5 A; 8 C; 1 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1677 CCCCAACTACATCTTCC 1693
              ||  |||||||||||||
Db          4 CCGTAACTACATCTTCC 20


RESULT 1552
ADD69057/c
ID   ADD69057 standard; DNA; 20 BP.
XX
AC   ADD69057;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Angiogenesis inhibitor-related PCR primer RBv8-WR2.
XX
KW   angiogenesis inhibitor; cytostatic; antiinflammatory; cancer;
KW   ovarian disease; diabetic retinopathy; inflammatory; ZAQ; Bv8; I5E; ss;
KW   PCR; primer; RBv8-WR2.
XX
OS   Unidentified.
XX
PN   WO2003066860-A1.
XX
PD   14-AUG-2003.
XX
PF   03-FEB-2003; 2003WO-JP001057.
XX
PR   04-FEB-2002; 2002JP-00027299.
XX
PA   (TAKE ) TAKEDA CHEM IND LTD.
XX
PI   Ohtaki T,  Masuda Y,  Takatsu Y;
XX
DR   WPI; 2003-646310/61.
XX
PT   Angiogenesis inhibitors for treatment and prevention of cancer, ovarian
PT   diseases and inflammatory disease.
XX
PS   Example 3; SEQ ID NO 35; 308pp; Japanese.
XX
CC   The invention relates to a novel angiogenesis inhibitor comprising a
CC   compound that inhibits the activity of an amino acid sequence given in
CC   the specification. Angiogenesis-related proteins Bv8, ZAQ and I5E were
CC   utilised within the method of the invention. The molecules of the
CC   invention demonstrate cytostatic and antiinflammatory activities whilst
CC   the method may be useful for treatment and prevention of cancer, ovarian
CC   diseases, diabetic retinopathy and inflammatory disease. The current
CC   sequence is that of the angiogenesis inhibitor-related PCR primer of the
CC   invention.
XX
SQ   Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        862 CTGAAGCAGTACCTGGA 878
              |||||||||  | |||||
Db         19 CTGAAGCAGGAGCTGGA 3


RESULT 1553
ADD42212
ID   ADD42212 standard; DNA; 20 BP.
XX
AC   ADD42212;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Human infertility associated primer SEQ ID 73.
XX
KW   primer; male infertility; infertility-associated mutation;
KW   azoospermia factor; Y-chromosome;
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KW   cystic fibrosis transmembrane conductance regulator; CTFR;
KW   Kallmann syndrome; KAL1; androgen resistance; steroid 21-hydroxylase;
KW   CYP21; microarray; quantitative trait locus; in vitro fertilization;
KW   oligospermia; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003050299-A2.
XX
PD   19-JUN-2003.
XX
PF   10-DEC-2002; 2002WO-EP013995.
XX
PR   10-DEC-2001; 2001DE-01060563.
XX
PA   (OGHA-) OGHAM GMBH.
XX
PI   Cullen P,  Seedorf U;
XX
DR   WPI; 2003-505402/47.
XX
PT   Investigating male genetic infertility, useful for diagnosis e.g. for
PT   assessing suitabilty for in vitro fertilization, based on multifactorial
PT   analysis of infertility-related mutations.
XX
PS   Claim 13; SEQ ID NO 73; 110pp; German.
XX
CC   This invention describes a novel method for investigating genetic
CC   infertility or predisposition in males. The method involves selecting at
CC   least two infertility-associated mutations which are recessive or
CC   intermediate that are associated with infertility in the heterozygous
CC   state and/or only in the homozygous state. Preferably at least one
CC   azoospermia factor is detected which may be lost by microdeletions in
CC   intervals 5 or 6 of the Y-chromosome. Also any of several hundred
CC   mutations, listed, present in the cystic fibrosis transmembrane
CC   conductance regulator (CTFR), Kallmann syndrome (KAL1), androgen
CC   resistance (AR) or steroid 21-hydroxylase (CYP21) genes may be detected.
CC   Probes for the mutated genes and/or native nucleic acid, or their
CC   complementary strands, are fixed to a carrier, particularly as a
CC   microarray, then tested for hybridization with oligonucleotides from or
CC   synthesized from, a patient sample and hybridization detected.
CC   Multifactorial analysis is by standard statistical methods, particularly
CC   the quantitative trait locus method. The method is used to diagnose
CC   inherited male infertility or predisposition to its, especially in
CC   conjunction with in vitro fertilization programs, e.g. for assessing
CC   subjects with oligospermia for possible application of the
CC   intracytoplasmic sperm injection method. Analysis of many mutations
CC   improves diagnosis of the genetic basis of male infertility, including
CC   polygenic origins (complex interactions between different heterozygotic
CC   mutations). A chip for analyzing genetic infertility in males comprises
CC   oligonucleotides that represent known mutations (nonsense or missence,
CC   insertions, allelic variants deletions or rearrangements) in the cystic
CC   fibrosis transmembrane conductance regulator, Kallmann syndrome, androgen
CC   resistance and steroid 21-hydroxylase genes. ADD42140-ADD42633 represent
CC   oligonucleotides used in the microarray described in the method of the
CC   invention. NOTE: there are no SEQ ID's 133, 472 or 473 represented in the
CC   SEQ ID list of the specification.
XX
SQ   Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        577 GTCAGCCTATCTGAGAT 593
              | |||||||| ||||||
Db          4 GGCAGCCTATGTGAGAT 20


RESULT 1554
ADE28941/c
ID   ADE28941 standard; DNA; 20 BP.
XX
AC   ADE28941;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Reverse Ag2597 RT-PCR primer used to amplify human NOV RNA.
XX
KW   NOVX; antidiabetic; anorectic; cardiant; hypotensive;
KW   antiarteriosclerotic; virucide; antibacterial; fungicide; protozoacide;
KW   nootropic; neuroprotective; antiparkinsonian; anticonvulsant;
KW   osteopathic; antiarthritic; antiinflammatory; dermatological;
KW   antiasthmatic; antilipaemic; metabolic; diabetes; obesity; infectious;
KW   anorexia; cancer; cardiovascular; hypertension; atherosclerosis;
KW   neurodegenerative; Alzheimer's disease; Parkinson's; epilepsy; immune;
KW   osteoarthritis; haemopoietic; inflammatory skin; asthma; dyslipidaemia;
KW   neurogenesis; cell differentiation; proliferation; haemopoiesis;
KW   wound healing; angiogenesis; gene therapy; chromosome mapping;
KW   tissue typing; human; NOV; PCR; primer; ss; RT-PCR.
XX
OS   Homo sapiens.
XX
PN   WO2003040330-A2.
XX
PD   15-MAY-2003.
XX
PF   05-NOV-2002; 2002WO-US035536.
XX
PR   05-NOV-2001; 2001US-0338626P.
PR   05-DEC-2001; 2001US-0336600P.
PR   07-DEC-2001; 2001US-0338285P.
PR   12-DEC-2001; 2001US-0341346P.
PR   17-DEC-2001; 2001US-0341477P.
PR   17-DEC-2001; 2001US-0341540P.
PR   20-DEC-2001; 2001US-0342592P.
PR   27-DEC-2001; 2001US-0344297P.
PR   31-DEC-2001; 2001US-0344903P.
PR   17-APR-2002; 2002US-0373288P.
PR   15-MAY-2002; 2002US-0380981P.
PR   17-MAY-2002; 2002US-0381495P.
PR   28-MAY-2002; 2002US-0383534P.
PR   28-MAY-2002; 2002US-0383744P.
PR   29-MAY-2002; 2002US-0383829P.
PR   29-MAY-2002; 2002US-0384024P.
PR   07-AUG-2002; 2002US-0401788P.
PR   26-AUG-2002; 2002US-0406353P.
PR   31-OCT-2002; 2002US-00287971.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Alsobrook JP,  Alvarez E,  Anderson DW,  Baron M,  Boldog FL;
PI   Burgess CE,  Casman SJ,  Chapoval A,  Dhanabal M,  Edinger SR,  Eisen A;
PI   Ellerman K,  Ettenberg S,  Gangolli EA,  Gerlach VL,  Gorman L;
PI   Grosse WM,  Guo X,  Hackett C,  Ji W,  Kekuda R,  Khramtsov NV;
PI   Lepley DM,  Li L,  Macdougall JR,  Malyankar UM,  Mazur A,  Mcqueeney K;
PI   Mezes PS,  Miller CE,  Millet I,  Mishra VS,  Padigaru M,  Patturajan M;
PI   Pena CEA,  Peyman JA,  Rastelli L,  Rieger DK,  Shenoy SG,  Shimkets RA;
PI   Smithson G,  Starling G,  Spytek KA,  Stone DJ,  Tchernev VT,  Twomlow N;
PI   Vernet CAM,  Zerhusen BD,  Zhong M;
XX
DR   WPI; 2003-441555/41.
XX
PT   New isolated NOVX polypeptides and polynucleotides, useful for
PT   preventing, diagnosing or treating NOVX-associated disorders, e.g.
PT   osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
PT   asthma, or infections.
XX
PS   Example C; SEQ ID NO 318; 447pp; English.
XX
CC   The invention relates to a novel isolated NOVX polypeptide. The
CC   polypeptide of the invention demonstrates, antidiabetic, anorectic,
CC   cardiant, hypotensive, antiarteriosclerotic, virucide, antibacterial,
CC   fungicide, protozoacide, nootropic, neuroprotective, antiparkinsonian,
CC   anticonvulsant, osteopathic, antiarthritic, antiinflammatory,
CC   dermatological, antiasthmatic and antilipaemic activities. The
```

CC polypeptides, nucleic acid molecules and antibodies may be useful for
CC treating or diagnosing diseases including metabolic disorders such as
CC diabetes and obesity, infectious diseases, anorexia, cancer,
CC cardiovascular diseases including hypertension and atherosclerosis,
CC neurodegenerative disorders such as Alzheimer's disease, Parkinson's
CC disease and epilepsy, immune disorders e.g. osteoarthritis, haemopoietic
CC disorders, inflammatory skin disorders, asthma and dyslipidaemia.
CC Furthermore, the nucleic acids and polypeptides may also be used to
CC identify molecules that modulate or inhibit neurogenesis, cell
CC differentiation and proliferation, haemopoiesis, wound healing and
CC angiogenesis, as well as in gene therapy. Finally, the nucleic acids may
CC be used as hybridisation probes, in chromosome mapping, tissue typing,
CC preventive medicine and pharmacogenomics. The current sequence is that of
CC the RT-PCR primer which was used within the exemplification of the
CC invention.
XX
SQ Sequence 20 BP; 10 A; 3 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1240 TTCATCTTCCGTATCTT 1256
||||||||||| || ||
Db 18 TTCATCTTCCGCATTTT 2

RESULT 1555
ADE52127
ID ADE52127 standard; DNA; 20 BP.
XX
AC ADE52127;
XX
DT 29-JAN-2004 (first entry)
XX
DE C. tropicalis CYP52A5A/B QC-RT-PCR primer #1.
XX
KW Yeast; ss; PCR; primer; cytochrome P450; CYP; NADPH reductase; CPR;
KW omega-hydroxylase complex; omega-oxidation; long chain fatty acid;
KW QC-RT PCR; Quantitative competitive reverse transcriptase PCR.
XX
OS Candida tropicalis.
XX
PN US2003073220-A1.
XX
PD 17-APR-2003.
XX
PF 03-MAY-2002; 2002US-00138916.
XX
PR 01-MAY-1998; 98US-0083798P.
PR 05-OCT-1998; 98US-0103099P.
PR 10-MAR-1999; 99US-0123555P.
PR 30-APR-1999; 99US-00302620.
PR 12-OCT-2001; 2001US-00976800.
XX
PA (WILS/) WILSON C R.
PA (CRAF/) CRAFT D L.
PA (EIRI/) EIRICH L D.
PA (ESHO/) ESHOO M.
PA (MADD/) MADDURI K M.
PA (CORN/) CORNETT C A.
PA (BREN/) BRENNER A A.
PA (TANG/) TANG M.
PA (LOPE/) LOPER J C.
PA (GLEE/) GLEESON M.
XX
PI Wilson CR, Craft DL, Eirich LD, Eshoo M, Madduri KM, Cornett CA;
PI Brenner AA, Tang M, Loper JC, Gleeson M;
XX
DR WPI; 2003-625522/59.
XX
PT New cytochrome P450 and NADPH oxidoreductase, i.e. CPR and CYP, genes and
PT proteins, useful for discriminating members of a gene family by
PT quantifying the amount of target mRNA in a sample, or for omega-oxidation
PT of long chain fatty acids.
XX
PS Example 11; SEQ ID NO 47; 194pp; English.
XX
CC The invention relates to isolated nucleic acids encoding cytochrome P450
CC (CYP) and NADPH reductase (CPR) enzymes of the omega-hydroxylase complex
CC of Candida tropicalis. Also included are the CYP and CPR proteins
CC (comprising CPRA, CPRB, CYP52A1A, CYP52A2A, CYP52A2B, CYP52A3A, CYP52A3B,
CC CYP52A5A, CYP52A5B, CYP52A8A, CYP52A8B, or CYP52D4A), a vector comprising
CC any one of the nucleic acid sequences cited above, a host cell
CC transfected or transformed with the nucleic acid, methods of producing
CC the CPR or CYP proteins, a method for discriminating members of a gene
CC family by quantifying the amount of target mRNA in a sample and methods
CC for increasing the production of a dicarboxylic acid, (or the CPR/CYP
CC proteins). The CPR and CYP genes and proteins are useful for
CC discriminating members of a gene family by quantifying the amount of
CC target mRNA in a sample, for increasing production of a dicarboxylic
CC acid, or for omega-oxidation of long chain fatty acids. The technique of
CC Quantitative competitive reverse transcriptase PCR (QC-RT PCR) was used
CC to quantitate the CPR/CYP mRNA in RNA sample. The present sequence is a
CC QC-RT PCR primer used in the analysis.
XX
SQ Sequence 20 BP; 7 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1010 AGAGGGGAGAGCTCAAG 1026
|||||| || |||||||
Db 2 AGAGGGCAGGGCTCAAG 18

RESULT 1556
ADF44137
ID ADF44137 standard; DNA; 20 BP.
XX
AC ADF44137;
XX
DT 12-FEB-2004 (first entry)
XX
DE HPV 6 detecting probe M0601.
XX
KW detection; human papillomavirus; HPV subtype; probe; ss.
XX
OS Human papillomavirus type 6.
XX
PN JP2002360271-A.
XX
PD 17-DEC-2002.
XX
PF 28-NOV-2001; 2001JP-00362595.
XX
PR 04-MAY-2001; 2001TW-00110785.
XX
PA (KING-) KING CAR FOOD IND CO LTD.
XX
DR WPI; 2003-600935/57.
XX
PT A detecting apparatus and a detecting method for identifying the subtypes
PT of many species of human papilloma viruses at the same time and a
PT composition for the detection.
XX
PS Claim 1; SEQ ID NO 494; 166pp; Japanese.
XX
CC This invention describes a novel detecting apparatus for identifying the
CC subtypes of human papillomaviruses (HPV) contained in a sample which
CC comprises a carrier which can load sample, a first oligonucleotide loaded
CC on first part of the carrier and a second oligonucleotide loaded on
CC second part of carrier, in which first and second oligonucleotides
CC hybridise with the DNA of the first and the second HPV subtype and can
CC identify HPV subtype contained in sample at the same time. ADF43644-

```
CC   ADF44289 represent oligonucleotide probes used in the method of the
CC   invention.
XX
SQ   Sequence 20 BP; 5 A; 8 C; 1 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1677 CCCCAACTACATCTTCC 1693
              ||  |||||||||||||
Db          4 CCGTAACTACATCTTCC 20


RESULT 1557
ADF44138
ID   ADF44138 standard; DNA; 20 BP.
XX
AC   ADF44138;
XX
DT   12-FEB-2004  (first entry)
XX
DE   HPV 6 detecting probe M0602.
XX
KW   detection; human papillomavirus; HPV subtype; probe; ss.
XX
OS   Human papillomavirus type 6.
XX
PN   JP2002360271-A.
XX
PD   17-DEC-2002.
XX
PF   28-NOV-2001; 2001JP-00362595.
XX
PR   04-MAY-2001; 2001TW-00110785.
XX
PA   (KING-) KING CAR FOOD IND CO LTD.
XX
DR   WPI; 2003-600935/57.
XX
PT   A detecting apparatus and a detecting method for identifying the subtypes
PT   of many species of human papilloma viruses at the same time and a
PT   composition for the detection.
XX
PS   Claim 1; SEQ ID NO 495; 166pp; Japanese.
XX
CC   This invention describes a novel detecting apparatus for identifying the
CC   subtypes of human papillomaviruses (HPV) contained in a sample which
CC   comprises a carrier which can load sample, a first oligonucleotide loaded
CC   on first part of the carrier and a second oligonucleotide loaded on
CC   second part of carrier, in which first and second oligonucleotides
CC   hybridise with the DNA of the first and the second HPV subtype and can
CC   identify HPV subtype contained in sample at the same time. ADF43644-
CC   ADF44289 represent oligonucleotide probes used in the method of the
CC   invention.
XX
SQ   Sequence 20 BP; 6 A; 7 C; 1 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1677 CCCCAACTACATCTTCC 1693
              ||  |||||||||||||
Db          3 CCGTAACTACATCTTCC 19


RESULT 1558
ADF70749
ID   ADF70749 standard; DNA; 20 BP.
XX
AC   ADF70749;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Hepatitis B virus PreS1 probe, SEQ ID 9.
XX
KW   PreS1; HBV; probe; ss.
XX
OS   Hepatitis B virus.
XX
PN   JP2002355098-A.
XX
PD   10-DEC-2002.
XX
PF   14-AUG-2001; 2001JP-00246141.
XX
PR   14-AUG-2000; 2000JP-00245606.
XX
PA   (GENO-) GENOME SCI KENKYUSHO KK.
XX
DR   WPI; 2003-451644/43.
XX
PT   Classification of genotype of hepatitis B viruses and primers and probes
PT   for the method.
XX
PS   Claim 3; Page 3; 13pp; Japanese.
XX
CC   The present invention relates to a method for judging the genotype of
CC   hepatitis B viruses (HBV) in which part of the gene sequence of the PreS1
CC   region of HBV is amplified by PCR using labelled primers and the
CC   amplified product is hybridized with HBV type A, B, C, D, E, F and G gene
CC   -specific probes and the label in the PCR product is detected.
XX
SQ   Sequence 20 BP; 8 A; 7 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1058 CAATCCCAACAAAGACA 1074
              ||||| |||||| ||||
Db          1 CAATCTCAACAAGGACA 17


RESULT 1559
ADF72434
ID   ADF72434 standard; DNA; 20 BP.
XX
AC   ADF72434;
XX
DT   12-FEB-2004  (first entry)
XX
DE   C. tropicalis CYP52A5 gene QC-RT-PCR primer seq id 47.
XX
KW   CYP52A2B; cytochrome P450; NADH reductase; dicarboxylic acid production;
KW   organic substrate oxidation; fatty acid oxidation;
KW   gene integration vector; CYP; CPR; CYP52A5; QC-RT-PCR;
KW   quantative competition reverse transcriptase PCR; primer; ss.
XX
OS   Candida tropicalis.
XX
PN   US2003077795-A1.
XX
PD   24-APR-2003.
XX
PF   12-OCT-2001; 2001US-00976800.
XX
PR   10-MAR-1999;   99US-0123555P.
XX
PA   (WILS/) WILSON C R.
PA   (CRAF/) CRAFT D L.
PA   (EIRI/) EIRICH L D.
PA   (ESHO/) ESHOO M.
PA   (MADD/) MADDURI K M.
PA   (CORN/) CORNETT C A.
```

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PA   (BREN/) BRENNER A A.
PA   (TANG/) TANG M.
PA   (LOPE/) LOPER J C.
PA   (GLEE/) GLEESON M.
XX
PI   Wilson CR,  Craft DL,  Eirich LD,  Eshoo M,  Madduri KM,  Cornett CA;
PI   Brenner AA,  Tang M,  Loper JC,  Gleeson M;
XX
DR   WPI; 2003-810780/76.
XX
PT   New nucleic acids encoding a CYP52A2B protein useful for increasing the
PT   production of dicarboxylic acid for oxidizing organic substrates such as
PT   fatty acids.
XX
PS   Example 10; SEQ ID NO 47; 188pp; English.
XX
CC   The invention describes an isolated nucleic acid encoding a CYP52A2B
CC   protein comprising the fully defined sequence of 522 amino acids, as
CC   given in the specification, and comprising a coding region defined by
CC   nucleotides 1072-2640 of a fully defined sequence of 3755 base pairs, as
CC   given in the specification. The nucleic acids encoding the cytochrome
CC   P450 and NADH reductase enzymes of Candida tropicalis are useful for
CC   increasing the production of dicarboxylic acid for oxidising organic
CC   substrates such as fatty acids. This sequence represents a quantative
CC   competition reverse transcriptase PCR (QC-RT-PCR) primer for quantating
CC   the level of Candida tropicalis CYP52A5 RNA in a sample.
XX
SQ   Sequence 20 BP; 7 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1010 AGAGGGGAGAGCTCAAG 1026
              ||||||  ||  |||||||
Db          2 AGAGGGCAGGGCTCAAG 18


RESULT 1560
ADF11874
ID   ADF11874 standard; DNA; 20 BP.
XX
AC   ADF11874;
XX
DT   12-FEB-2004  (first entry)
XX
DE   C. tropicalis QC-RT-PCR primer #11.
XX
KW   ss; primer; QC-RT-PCR; CPRA; CPRB; CYP52A1A; CYP52A2A; CYP52A2B;
KW   CYP52A3A; CYP52A3B; CYP52A5A; CYP52A5B; CYP52A8A; CYP52A8B; CYP52D4A;
KW   gene family; quantitative competitive reverse transcription.
XX
OS   Candida tropicalis.
XX
PN   US2003153060-A1.
XX
PD   14-AUG-2003.
XX
PF   03-MAY-2002; 2002US-00139218.
XX
PR   01-MAY-1998;   98US-0083798P.
PR   05-OCT-1998;   98US-0103099P.
PR   10-MAR-1999;   99US-0123555P.
PR   30-APR-1999;   99US-00302620.
PR   12-OCT-2001; 2001US-00976800.
XX
PA   (WILS/) WILSON C R.
PA   (CRAF/) CRAFT D L.
PA   (EIRI/) EIRICH L D.
PA   (ESHO/) ESHOO M.
PA   (MADD/) MADDURI K M.
PA   (CORN/) CORNETT C A.
PA   (BREN/) BRENNER A A.
PA   (TANG/) TANG M.
PA   (LOPE/) LOPER J C.
PA   (GLEE/) GLEESON M.
XX
PI   Wilson CR,  Craft DL,  Eirich LD,  Eshoo M,  Madduri KM,  Cornett CA;
PI   Brenner AA,  Tang M,  Loper JC,  Gleeson M;
XX
DR   WPI; 2003-897719/82.
XX
PT   New CPRA, CPRB, CYP52A1A, CYP52A2A, CYP52A2B, CYP52A3A, CYP52A3B,
PT   CYP52A5A, CYP52A5B, CYP52A8A, CYP52A8B or CYP52D4A gene, useful for
PT   increasing production of dicarboxylic acid.
XX
PS   Example 11; SEQ ID NO 47; 194pp; English.
XX
CC   The invention relates to a new isolated nucleic acid which encodes a
CC   CPRA, CPRB, CYP52A1A, CYP52A2A, CYP52A2B, CYP52A3A, CYP52A3B, CYP52A5A,
CC   CYP52A5B, CYP52A8A, CYP52A8B or CYP52D4A protein. The nucleic acid is
CC   useful for discriminating between members of a gene family by quantifying
CC   the amount of mRNA in a sample. The present sequence represents a Candida
CC   tropicalis quantitative competitive reverse transcription (QC-RT)-PCR
CC   primer.
XX
SQ   Sequence 20 BP; 7 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1010 AGAGGGGAGAGCTCAAG 1026
              ||||||  ||  |||||||
Db          2 AGAGGGCAGGGCTCAAG 18


RESULT 1561
ADF11756
ID   ADF11756 standard; DNA; 20 BP.
XX
AC   ADF11756;
XX
DT   12-FEB-2004  (first entry)
XX
DE   C. tropicalis QC-RT-PCR primer #11.
XX
KW   ss; primer; QC-RT-PCR; CPRA; CPRB; CYP52A1A; CYP52A2A; CYP52A2B;
KW   CYP52A3A; CYP52A3B; CYP52A5A; CYP52A5B; CYP52A8A; CYP52A8B; CYP52D4A;
KW   gene family; quantitative competitive reverse transcription.
XX
OS   Candida tropicalis.
XX
PN   US2003148486-A1.
XX
PD   07-AUG-2003.
XX
PF   03-MAY-2002; 2002US-00139296.
XX
PR   01-MAY-1998;   98US-0083798P.
PR   05-OCT-1998;   98US-0103099P.
PR   10-MAR-1999;   99US-0123555P.
PR   30-APR-1999;   99US-00302620.
PR   12-OCT-2001; 2001US-00976800.
XX
PA   (WILS/) WILSON C R.
PA   (CRAF/) CRAFT D L.
PA   (EIRI/) EIRICH L D.
PA   (ESHO/) ESHOO M.
PA   (MADD/) MADDURI K M.
PA   (CORN/) CORNETT C A.
PA   (BREN/) BRENNER A A.
PA   (TANG/) TANG M.
PA   (LOPE/) LOPER J C.
PA   (GLEE/) GLEESON M.
XX
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PI Wilson CR, Craft DL, Eirich LD, Eshoo M, Madduri KM, Cornett CA;
PI Brenner AA, Tang M, Loper JC, Gleeson M;
XX
DR WPI; 2003-897579/82.
XX
PT New CPRA, CPRB, CYP52A1A, CYP52A2A, CYP52A2B, CYP52A3A, CYP52A3B,
PT CYP52A5A, CYP52A5B, CYP52A8A, CYP52A8B or CYP52D4A gene, useful for
PT discriminating members of a gene family.
XX
PS Example 11; SEQ ID NO 47; 196pp; English.
XX
CC The invention relates to a new isolated nucleic acid which encodes a
CC CPRA, CPRB, CYP52A1A, CYP52A2A, CYP52A2B, CYP52A3A, CYP52A3B, CYP52A5A,
CC CYP52A5B, CYP52A8A, CYP52A8B or CYP52D4A protein. The nucleic acid is
CC useful for discriminating between members of a gene family by quantifying
CC the amount of mRNA in a sample. The present sequence represents a Candida
CC tropicalis quantitative competitive reverse transcription (QC-RT)-PCR
CC primer.
XX
SQ Sequence 20 BP; 7 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1010 AGAGGGGAGAGCTCAAG 1026
||||||||||||||||
Db 2 AGAGGGCAGGGCTCAAG 18

RESULT 1562
ADF53068/c
ID ADF53068 standard; DNA; 20 BP.
XX
AC ADF53068;
XX
DT 12-FEB-2004 (first entry)
XX
DE Variant detecting primer extension assay extension primer, SEQ ID No 24.
XX
KW variant detection; primer extension assay; mutation; cancer;
KW heterogeneous; sporadic mutation; genotyping; pooled sample; primer; ss.
XX
OS Unidentified.
XX
PN WO2003071252-A2.
XX
PD 28-AUG-2003.
XX
PF 18-FEB-2003; 2003WO-US004827.
XX
PR 15-FEB-2002; 2002US-0357585P.
XX
PA (EXAC-) EXACT SCI CORP.
XX
PI Shuber AP, Kann L, Whitney D;
XX
DR WPI; 2003-697649/66.
XX
PT Detecting a variant in a primer extension assay, useful for analyzing
PT molecular events for identifying mutations indicative of cancer, by
PT contacting a target nucleic acid primer complementary to a region of the
PT target nucleic acid.
XX
PS Example 3; SEQ ID NO 24; 54pp; English.
XX
CC The invention relates to a novel method for detecting a variant in a
CC primer extension assay, useful for analysing molecular events for
CC identifying mutations indicative of cancer, by contacting a target
CC nucleic acid primer complementary to a region of the target nucleic acid.
CC Detecting a variant in a primer extension assay comprises contacting a
CC target nucleic acid primer complementary to a region of the target
CC nucleic acid, and extending the primer in the presence of a first
CC nucleotide that is complementary to a first variant nucleotide suspected
CC to be at a position downstream of the region and a second nucleotide that
CC is complementary to a second variant nucleotide at the position, thus to
CC reduce misincorporation of the first nucleotide on a template comprising
CC the second variant nucleotide. The methods are useful for analysing
CC molecular events for identifying individuals with mutations indicative of
CC cancer. They are particularly useful in detecting a rare mutation in a
CC heterogeneous biological sample (e.g. sporadic mutation in a
CC heterogeneous patient sample), detecting rare genotypes in genotyping
CC reactions (e.g. viral genotyping reactions), or detecting mutant or viral
CC sequences in pooled samples (e.g. detecting polymorphisms or inherited
CC sequence variations in pooled patient samples). This polynucleotide
CC sequence represents a primer used as part of the primer extension assay
CC of the invention.
XX
SQ Sequence 20 BP; 7 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 863 TGAAGCAGTACCTGGAT 879
|||||||||||||||||
Db 17 TGAAGAAGTTCCTGGAT 1

RESULT 1563
ADF88236
ID ADF88236 standard; DNA; 20 BP.
XX
AC ADF88236;
XX
DT 26-FEB-2004 (first entry)
XX
DE Single nucleotide polymorphism detection primer, SEQ ID No 1819.
XX
KW human; single nucleotide polymorphism; microarray; side effect; ss;
KW primer; PCR.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN JP2003235571-A.
XX
PD 26-AUG-2003.
XX
PF 12-FEB-2002; 2002JP-00034717.
XX
PR 12-FEB-2002; 2002JP-00034717.
XX
PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR WPI; 2003-820454/77.
XX
PT Novel polynucleotide useful for detecting single nucleotide polymorphisms
PT in human gene.
XX
PS Claim 2; SEQ ID NO 1819; 704pp; Japanese.
XX
CC The invention relates to a novel polynucleotide isolated and purified
CC from a human gene having any one of 935 fully defined sequences as given
CC in specification, or a sequence having a base substitution. The invention
CC further relates to: an oligonucleotide containing single nucleotide
CC polymorphisms; a PCR primer set chosen from the combination of two DNA
CC fragments from any one of 1220 fully defined sequences as given in
CC specification; a labelling probe containing the SNP containing oligo; and
CC a microarray equipped with the SNP containing oligo. The isolated human
CC gene of the invention is useful for detecting the single nucleotide
CC polymorphisms in human gene. The isolated human gene is also useful for
CC diagnosis of disease and determination of side effect to a medical agent.
CC The isolated human gene is also effective in detecting single nucleotide
CC polymorphisms in a human gene. This polynucleotide sequence represents
CC one of the PCR primers used in the single nucleotide polymorphism

CC detection method of the invention.
XX
SQ Sequence 20 BP; 3 A; 1 C; 11 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 227 AGAGTGGTGGTGGTGGC 243
||| |||||| |||||||
Db 4 AGATTGGTGGAGGTGGC 20

RESULT 1564
ABZ86270/c
ID ABZ86270 standard; DNA; 20 BP.
XX
AC ABZ86270;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 1512; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 58 TGACTGCTGAAACCCAG 74
||||||||||| |||
Db 19 TGACTGCTGAAATACAG 3

RESULT 1565
ABZ89410/c
ID ABZ89410 standard; DNA; 20 BP.
XX
AC ABZ89410;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 4652; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO

```
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 20 BP; 6 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        343 TTGAAGATGGGGTCTGA 359
              |||||||||  ||||||
Db         20 TTGAAGATGAAGTCTGA 4


RESULT 1566
ABZ97631
ID   ABZ97631 standard; DNA; 20 BP.
XX
AC   ABZ97631;
XX
DT   17-OCT-2003  (first entry)
XX
DE   Human IL5-R oligonucleotide sequence.
XX
KW   Human; antisense; lung dysfunction; nasal airway dysfunction;
KW   antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW   antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW   antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW   adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW   lung inflammation; respiratory disease; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285308-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013135.
XX
PR   24-APR-2001; 2001US-0286137P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-229219/22.
XX
PT   Pharmaceutical composition for treating ailments associated with impaired
PT   respiration, has oligo(s) antisense to specific gene(s) or its
PT   corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT   ubiquinone.
XX
PS   Disclosure; SEQ ID NO 12873; 872pp; English.
XX
CC   The invention relates to a novel pharmaceutical composition, which has a
CC   first active agent comprising an oligonucleotide antisense to the
CC   initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC   5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC   junctions of genes encoding a polypeptide associated with lung and/or
CC   nasal airway dysfunction and a second active agent comprising an
CC   antiinflammatory steroid and ubiquinone. A composition of the invention
CC   has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC   immunosuppressive, and cytostatic activity. The composition may have a
CC   use in antisense gene therapy. The composition is useful for treating or
CC   preventing a respiratory, lung or malignant disease or condition, also
CC   for enhancing the prophylactic or therapeutic respiratory effect of an
CC   antiinflammatory steroid in a subject, for reducing or depleting levels
CC   of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC   receptor, producing bronchodilation, increasing levels of ubiquinone or
CC   lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC   lung inflammation, lung allergies, or a respiratory disease or condition.
CC   Note: The sequence data for this patent is not represented in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1444 ATGAAACATCCATTCTT 1460
              |||||  |||||||  |||
Db          3 ATGAAGCATCCATACTT 19


RESULT 1567
ABZ91330
ID   ABZ91330 standard; DNA; 20 BP.
XX
AC   ABZ91330;
XX
DT   17-OCT-2003  (first entry)
XX
DE   Human oligonucleotide sequence.
XX
KW   Human; antisense; lung dysfunction; nasal airway dysfunction;
KW   antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW   antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW   antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW   adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW   lung inflammation; respiratory disease; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285308-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013135.
XX
PR   24-APR-2001; 2001US-0286137P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-229219/22.
XX
PT   Pharmaceutical composition for treating ailments associated with impaired
PT   respiration, has oligo(s) antisense to specific gene(s) or its
PT   corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT   ubiquinone.
XX
PS   Disclosure; SEQ ID NO 6572; 872pp; English.
XX
CC   The invention relates to a novel pharmaceutical composition, which has a
CC   first active agent comprising an oligonucleotide antisense to the
CC   initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC   5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC   junctions of genes encoding a polypeptide associated with lung and/or
CC   nasal airway dysfunction and a second active agent comprising an
CC   antiinflammatory steroid and ubiquinone. A composition of the invention
CC   has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC   immunosuppressive, and cytostatic activity. The composition may have a
CC   use in antisense gene therapy. The composition is useful for treating or
CC   preventing a respiratory, lung or malignant disease or condition, also
CC   for enhancing the prophylactic or therapeutic respiratory effect of an
CC   antiinflammatory steroid in a subject, for reducing or depleting levels
CC   of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC   receptor, producing bronchodilation, increasing levels of ubiquinone or
CC   lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC   lung inflammation, lung allergies, or a respiratory disease or condition.
CC   Note: The sequence data for this patent is not represented in the printed
CC   specification, but was obtained in electronic format directly from WIPO
```

CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1269 TGAGGAGACGTGGCCAG 1285
||||||||||||||| |
Db 4 TGAGGACACGTGGCCTG 20

RESULT 1568
ABZ93366/c
ID ABZ93366 standard; DNA; 20 BP.
XX
AC ABZ93366;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 8608; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 2 A; 3 C; 9 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 548 ACAAGCCCCTCAGCCGC 564
||||| |||||| ||||
Db 18 ACAAGGCCCTCAACCGC 2

RESULT 1569
ABZ85750/c
ID ABZ85750 standard; DNA; 20 BP.
XX
AC ABZ85750;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Claim 15; SEQ ID NO 992; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO

```
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 20 BP; 6 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        212 AGATAGGCCTGGATGAG 228
              |||| |||||| |||||
Db         17 AGATGGGCCTGTATGAG 1


RESULT 1570
ABS57272
ID   ABS57272 standard; DNA; 20 BP.
XX
AC   ABS57272;
XX
DT   30-JAN-2003  (first entry)
XX
DE   Human PDEF DNA, PCR primer 603.
XX
KW   Human; retinal pigmented epithelium derived neurotrophic factor; PEDF;
KW   retinal disease; retinal tumour; retinoblastoma; retinal detachment;
KW   neuronal-retinal tumour; macular degeneration; retinitis pigmentosa;
KW   diabetic retinopathy; inherited and age-related pathology; tumour;
KW   ocular disease; nerve injury; serine protease related disorder;
KW   cytostatic; ophthalmological; antiinflammatory; antidiabetic; PCR;
KW   primer; ss.
XX
OS   Homo sapiens.
XX
PN   US6451763-B1.
XX
PD   17-SEP-2002.
XX
PF   29-AUG-1995;   95US-00520373.
XX
PR   04-JUN-1992;   92US-00894215.
PR   24-SEP-1992;   92US-00952796.
PR   25-JUL-1994;   94US-00279979.
PR   25-JAN-1995;   95US-00377710.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Tombran-Tink J,  Chader GJ,  Becerra SP,  Rodriguez IR,  Steele FR;
PI   Johnson LV;
XX
DR   WPI; 2003-056723/05.
XX
PT   Treating retinal disease such as retinal tumors, retinitis pigmentosa,
PT   macular degeneration and diabetic retinopathy, in a subject, involves
PT   administering Pigment Epithelium Derived Factor to the subject.
XX
PS   Example 48; Col 45; 53pp; English.
XX
CC   The present invention relates to the isolation of a human retinal
CC   pigmented epithelium derived neurotrophic factor (PEDF), and
CC   polynucleotide sequences encoding it. The gene encoding human PEDF maps
CC   to chromosome 17p13.1-pter. The invention also describes a truncated
CC   version of PEDF referred to as PEDF-BH, vectors comprising nucleic acids
CC   encoding PEDF or PEDF-BH, and a method of using these sequences to treat
CC   retinal diseases such as retinal tumours (e.g. retinoblastoma), neuronal-
CC   retinal tumours, macular degeneration, retinitis pigmentosa, retinal
CC   detachment, diabetic retinopathy, inherited and age-related pathologies,
CC   tumours, ocular diseases, nerve injuries, and conditions resulting from
CC   the activity of serine proteases. The present sequence represents a PCR
CC   primer used to isolate human PEDF genomic clones
XX
SQ   Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1631 CCAGCAGGCAGCGGCTG 1647
              | ||| ||||||||||||
Db          2 CAAGCTGGCAGCGGCTG 18


RESULT 1571
ABZ80343
ID   ABZ80343 standard; DNA; 20 BP.
XX
AC   ABZ80343;
XX
DT   28-MAY-2003  (first entry)
XX
DE   Mouse Emx1 antisense PCR primer SEQ ID NO:66.
XX
KW   Purification; neural stem cell; NSC; undifferentiated; nootropic;
KW   neuroprotective; antiparkinsonian; gene therapy; nervous system;
KW   central nervous system; CNS; Alzheimer's disease; Parkinson's disease;
KW   acute brain injury; CNS dysfunction; tissue regeneration; tissue repair;
KW   PCR primer; ss.
XX
OS   Mus sp.
OS   Synthetic.
XX
PN   WO200297067-A1.
XX
PD   05-DEC-2002.
XX
PF   31-MAY-2002; 2002WO-AU000700.
XX
PR   01-JUN-2001; 2001AU-00005403.
XX
PA   (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.
XX
PI   Bartlett PF,  Rietze RL;
XX
DR   WPI; 2003-140465/13.
XX
PT   Generating substantially homogeneous population of undifferentiated cells
PT   from sample, by disrupting tissue sample, discriminating cells in
PT   population based on size and performing cell-surface marker-
PT   discrimination.
XX
PS   Example 10; Page 48; 90pp; English.
XX
CC   The present invention describes a method (M) for generating a
CC   substantially homogeneous population of undifferentiated cells (UC) from
CC   a biological sample (BS), which comprises subjecting BS or its sub-sample
CC   to tissue-disruption to provide a mixed population (MP) comprising UC,
CC   subjecting MP to a cell size-discrimination (SD) step, and simultaneously
CC   or sequentially with SD, subjecting the cell population obtained to a
CC   cell-surface marker-discrimination step. Also described: (1) a
CC   substantially homogeneous population of undifferentiated cells (I)
CC   prepared by (M); (2) a composition (II) for use in cell replacement
CC   therapy, comprising a population of substantially homogeneous population
CC   of neural stem cells (NSCs) generated by (M); and (3) a composition (III)
CC   comprising a growth factor identified using a homogeneous population of
CC   NSCs generated by (M). (I) can have nootropic, neuroprotective and
CC   antiparkinsonian activities, and can be used in gene therapy. (M) is
CC   useful for generating a substantially homogeneous population of
CC   undifferentiated cells such as NSCs from a biological sample, and is
CC   useful for the replacement of neural or non-neural tissue in an animal.
CC   (II) is useful in cell replacement therapy in an organ such as the brain
CC   or in the nervous system, preferably central nervous system (CNS), for
CC   treating a CNS disorder such as Alzheimer's disease, Parkinson's disease,
CC   acute brain injury and CNS dysfunction. (I) is useful for the repair or
CC   regeneration of tissue. ABZ80278 to ABZ80363 represent PCR primers which
CC   are used in an example from the present invention for markers defining
CC   cell populations
XX
```

```
SQ   Sequence 20 BP; 1 A; 10 C; 1 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        919 TTCCTGTTCCAGCTGCT 935
              ||||| |||||||| ||
Db          4 TTCCTCTTCCAGCTTCT 20


RESULT 1572
ABX33976
ID   ABX33976 standard; DNA; 20 BP.
XX
AC   ABX33976;
XX
DT   10-FEB-2003  (first entry)
XX
DE   Human interleukin 12 p40 subunit antisense oligonucleotide ISIS #139149.
XX
KW   Human; ss; antisense; interleukin 12 p40 subunit; antibacterial;
KW   antiinflammatory; cytostatic; infection; inflammation; tumour.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "All cytosines are 5-methylcytidines and the
FT                    nucleotides are linked via a phosphorothioate backbone"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   US6448081-B1.
XX
PD   10-SEP-2002.
XX
PF   07-MAY-2001; 2001US-00851062.
XX
PR   07-MAY-2001; 2001US-00851062.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Baker BF,  Freier SM;
XX
DR   WPI; 2003-074100/07.
XX
PT   New antisense chimeric oligonucleotide, useful for modulating the
PT   expression of human Interleukin 12 p40 subunit, in treating or preventing
PT   disease states in humans and animals, and as research reagents and
PT   diagnostics.
XX
PS   Example 15; Col 45; 42pp; English.
XX
CC   The invention relates to an antisense compound 20-50 nucleobases in
CC   length targeted to a start codon region, coding region, a stop codon
CC   region or a 3'-untranslated region of a nucleic acid molecule encoding
CC   human Interleukin 12 p40 subunit. The compound specifically hybridises
CC   with one of the regions and inhibits the expression of human Interleukin
CC   12 p40 subunit. The new compound is useful for inhibiting the expression
CC   of human Interleukin 12 p40 subunit in cells or tissues and comprises
CC   contacting the cells or tissues in vitro with the compound, so that
CC   expression of the human Interleukin 12 p40 subunit is inhibited. The
CC   antisense compound may also be used as research reagents and diagnostics,
CC   and as treatment or prevention of disease states, e.g. to prevent or
CC   delay infection, inflammation or tumour formation, in animals and humans.
CC   The present sequence is an antisense oligonucleotide of the invention
XX
SQ   Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        480 ACTACCAGCTGACATCC 496
              ||| |||||||||| |||
Db          3 ACTCCCAGCTGACCTCC 19


RESULT 1573
ACD42154/c
ID   ACD42154 standard; DNA; 20 BP.
XX
AC   ACD42154;
XX
DT   05-SEP-2003  (first entry)
XX
DE   Human raf-associated antisense oligonucleotide #16.
XX
KW   Antisense; c-raf; a-raf; b-raf; protein kinase; cancer; ss;
KW   signal transduction; cell proliferation; lung carcinoma; cytostatic;
KW   antisense gene therapy; chemotherapeutic agent; angiogenesis;
KW   hyperproliferative condition; neovascularisation; ocular angiogenesis.
XX
OS   Unidentified.
XX
PN   US2003032607-A1.
XX
PD   13-FEB-2003.
XX
PF   25-JAN-2002; 2002US-00057550.
XX
PR   31-MAY-1994;   94US-00250856.
PR   31-MAY-1995;   95WO-US007111.
PR   26-NOV-1996;   96US-00756806.
PR   07-JUL-1997;   97US-00888982.
PR   06-JUL-1998;   98WO-US013961.
PR   28-AUG-1998;   98US-00143214.
PR   18-FEB-2000; 2000US-00506073.
XX
PA   (MONI/) MONIA B P.
XX
PI   Monia BP;
XX
DR   WPI; 2003-503332/47.
XX
PT   Novel antisense oligonucleotide which is targeted to mRNA encoding human
PT   raf and which is capable of inhibiting raf expression, useful for
PT   treating or preventing hyperproliferative conditions such as cancer.
XX
PS   Disclosure; Page 32; 42pp; English.
XX
CC   The invention relates to an oligonucleotide 8-50 nucleotides in length
CC   which is targeted to mRNA encoding human c-raf, a-raf or b-raf (raf is a
CC   protein kinase playing a regulatory role in signal transduction,
CC   regulating cell proliferation and has been implicated in lung carcinoma),
CC   and which is capable of inhibiting raf expression. Also included is a
CC   composition comprising the oligonucleotide and a pharmaceutically
CC   acceptable carrier. The antisense oligonucleotide is useful for
CC   inhibiting the expression of human raf in human cells or tissues, by
CC   contacting the human cells or tissues with the oligo. The oligo. is also
CC   is useful for treating or preventing a disease or condition associated
CC   with the expression of raf by administering it in combination with a
CC   chemotherapeutic agent to a human or cells of the human, where the
CC   expression of raf is abnormal expression, and the condition is a
CC   hyperproliferative condition such as cancer, angiogenesis or
CC   neovascularisation (preferably ocular angiogenesis or
CC   neovascularisation). The oligo. is also useful for inhibiting
```

```
CC   hyperproliferation of cells. The oligos. are also useful as tools, for
CC   example for detecting and determining the role of raf expression in
CC   various cell functions and physiological processes and conditions and for
CC   diagnosing conditions associated with raf expression and for research
CC   purposes. The present sequence is an antisense oligonucleotide included
CC   in the sequence listing but not mentioned elsewhere in the specification
XX
SQ   Sequence 20 BP; 6 A; 10 C; 0 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1152 TGACATGTGGGGTGTGG 1168
              ||| ||||| |||||||
Db         17 TGAGATGTGTGGTGTGG 1


RESULT 1574
ADJ83180/c
ID   ADJ83180 standard; DNA; 20 BP.
XX
AC   ADJ83180;
XX
DT   06-MAY-2004  (first entry)
XX
DE   RT-PCR primer used to analyse human NOV8 expression - SEQ 171.
XX
KW   NOVX; cytostatic; antiarteriosclerotic; antidiabetic; antiasthmatic;
KW   antiallergic; antiinflammatory; respiratory; antiarthritic;
KW   dermatological; antibacterial; cerebroprotective; vasotropic; cardiant;
KW   haemostatic; hypotensive; hepatotropic; neuroprotective; anorectic;
KW   nootropic; antiulcer; muscular; immunosuppressive; gynaecological;
KW   antipsoriatic; endocrine; ophthalmological; osteopathic;
KW   antiparkinsonian; anticonvulsant; tranquiliser; analgesic; nephrotropic;
KW   antiinfertility; antilipaemic; cardiomyopathy; atherosclerosis; diabetes;
KW   cell signal processing; metabolic pathway; asthma; allergy; emphysema;
KW   autoimmune; graft-versus-host; arthritis; cancer; stroke; haemophilia;
KW   obesity; Alzheimer's; pain; chromosome mapping; tissue typing; human;
KW   RT-PCR; PCR; primer; ss; NOV8.
XX
OS   Homo sapiens.
XX
PN   US2003170630-A1.
XX
PD   11-SEP-2003.
XX
PF   21-DEC-2001; 2001US-00032189.
XX
PR   21-DEC-2000; 2000US-0257495P.
PR   22-DEC-2000; 2000US-0258171P.
PR   20-FEB-2001; 2001US-0269940P.
PR   08-MAR-2001; 2001US-0274192P.
PR   22-MAR-2001; 2001US-0277826P.
PR   29-MAR-2001; 2001US-0279840P.
PR   11-APR-2001; 2001US-0282981P.
PR   13-APR-2001; 2001US-0283656P.
PR   31-JUL-2001; 2001US-0309247P.
PR   10-AUG-2001; 2001US-0311754P.
PR   17-AUG-2001; 2001US-0313331P.
XX
PA   (ALSO/) ALSOBROOK J P.
PA   (TCHE/) TCHERNEV V T.
PA   (LIUX/) LIU X.
PA   (SPYT/) SPYTEK K A.
PA   (ZERH/) ZERHUSEN B D.
PA   (PATT/) PATTURAJAN M.
PA   (LEPL/) LEPLEY D M.
PA   (BURG/) BURGESS C E.
PA   (SHIM/) SHIMKETS R A.
PA   (GROS/) GROSSE W M.
PA   (SZEK/) SZEKERES E S.
PA   (VERN/) VERNET C A M.
PA   (LILL/) LI L.
PA   (CASM/) CASMAN S J.
PA   (BOLD/) BOLDOG F L.
PA   (GORM/) GORMAN L.
PA   (GANG/) GANGOLLI E A.
PA   (FERN/) FERNANDES E R.
PA   (RIEG/) RIEGER D K.
PA   (EDIN/) EDINGER S R.
PA   (GUNT/) GUNTHER E.
PA   (MILL/) MILLET I.
PA   (SCIO/) SCIORE P.
PA   (ELLE/) ELLERMAN K.
PA   (MACD/) MACDOUGALL J R.
PA   (SMIT/) SMITHSON G.
XX
PI   Alsobrook JP,  Tchernev VT,  Liu X,  Spytek KA,  Zerhusen BD;
PI   Patturajan M,  Lepley DM,  Burgess CE,  Shimkets RA,  Grosse WM;
PI   Szekeres ES,  Vernet CAM,  Li L,  Casman SJ,  Boldog FL,  Gorman L;
PI   Gangolli EA,  Fernandes ER,  Rieger DK,  Edinger SR,  Gunther E;
PI   Millet I,  Sciore P,  Ellerman K,  Macdougall JR,  Smithson G;
XX
DR   WPI; 2003-898249/82.
XX
PT   New NOVX polypeptides and nucleic acid molecules, useful for diagnosing,
PT   preventing or treating NOVX-associated polypeptide disorder, e.g.
PT   cardiomyopathy, atherosclerosis, diabetes, cancer, Parkinson's disease or
PT   asthma.
XX
PS   Example 2; SEQ ID NO 171; 263pp; English.
XX
CC   The invention relates to a novel isolated NOVX polypeptide. The
CC   polypeptide demonstrates cytostatic, antiarteriosclerotic, antidiabetic,
CC   antiasthmatic, antiallergic, antiinflammatory, respiratory,
CC   antiarthritic, dermatological, antibacterial, cerebroprotective,
CC   vasotropic, cardiant, haemostatic, hypotensive, hepatotropic,
CC   neuroprotective, anorectic, nootropic, antiulcer, muscular,
CC   immunosuppressive, gynaecological, antipsoriatic, endocrine,
CC   ophthalmological, osteopathic, antiparkinsonian, anticonvulsant,
CC   tranquiliser, analgesic, nephrotropic, antiinfertility and antilipaemic
CC   activities. The NOVX polypeptide, nucleic acid or antibody of the
CC   invention may be useful for treating or preventing a NOVX-associated
CC   disorder, such as cardiomyopathy, atherosclerosis, diabetes or a disorder
CC   related to cell signal processing and metabolic pathway modulation.
CC   Furthermore, the NOVX polypeptides may be useful for diagnosing, treating
CC   or preventing diseases such as asthma, allergies, emphysema, autoimmune
CC   disease, graft-versus-host disease, arthritis, cancer, stroke,
CC   haemophilia, obesity, Alzheimer's disease and pain. The nucleic acids may
CC   be used as hybridisation probes, in chromosome mapping, tissue typing,
CC   preventive medicine or pharmacogenomics. The current sequence is that of
CC   an RT-PCR primer of the invention which is used to analyse human NOVX
CC   expression.
XX
SQ   Sequence 20 BP; 10 A; 3 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1240 TTCATCTTCCGTATCTT 1256
              ||||||||||| || ||
Db         18 TTCATCTTCCGCATTTT 2


RESULT 1575
ADM83655/c
ID   ADM83655 standard; DNA; 20 BP.
XX
AC   ADM83655;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Cyclin 14-3-3 sigma RT-PCR primer #2.
XX
```

KW cellular proliferative disorder; breast cancer; methylation;
KW predisposition; reverse transcriptase PCR; RT-PCR; primer; CpG island;
KW ss; cyclin 14-3-3 sigma; human.
XX
OS Homo sapiens.
XX
PN US2003138783-A1.
XX
PD 24-JUL-2003.
XX
PF 28-JAN-2002; 2002US-00059579.
XX
PR 26-JAN-2001; 2001US-00771357.
XX
PA (SUKU/) SUKUMAR S.
PA (EVRO/) EVRON E.
PA (DOOL/) DOOLEY W C.
PA (SACC/) SACCHI N.
PA (DAVI/) DAVIDSON N.
PA (FACK/) FACKLER M J.
XX
PI Sukumar S, Evron E, Dooley WC, Sacchi N, Davidson N, Fackler MJ;
XX
DR WPI; 2003-851722/79.
XX
PT Diagnosing a cellular proliferative disorder of breast tissue in a
PT subject comprises determining the state of methylation of one or more
PT nucleic acid isolated from the subject.
XX
PS Claim 12; SEQ ID NO 42; 59pp; English.
XX
CC The invention describes a method of diagnosing a cellular proliferative
CC disorder of breast tissue in a subject comprising determining the state
CC of methylation of one or more nucleic acid isolated from the subject,
CC where the state of methylation of one or more nucleic acids is compared
CC with the state of methylation of one or more nucleic acids from a subject
CC not having the cellular proliferative disorder of breast tissue. Also
CC described are: a method for determining a predisposition to a cellular
CC proliferative disorder of breast tissue in a subject; a method of
CC diagnosing a cellular proliferative disorder of breast tissue in a
CC subject; and a kit for the detecting a cellular proliferative disorder of
CC breast tissue in a subject. The method is useful for diagnosing a
CC cellular proliferative disorder of breast tissue in a subject. This
CC sequence represents a reverse transcriptase PCR primer used in the
CC analysis of the methylation state of cyclin 14-3-3 sigma CpG islands in
CC normal mammary epithelium, breast cancer cell lines and in primary
CC mammary tumours.
XX
SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 843 TGAGTACCTGGACAAGG 859
||||||||| ||| ||||
Db 18 TGAGTACCGGGAGAAGG 2

RESULT 1576
ABD30662
ID ABD30662 standard; DNA; 20 BP.
XX
AC ABD30662;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human IL5-R derived oligonucleotide SEQ ID 12873.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 12873; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1444 ATGAAACATCCATTCTT 1460
||||| ||||||| |||
Db 3 ATGAAGCATCCATACTT 19

RESULT 1577
ABD29596/c

```
ID   ABD29596 standard; DNA; 20 BP.
XX
AC   ABD29596;
XX
DT   29-JUL-2004  (first entry)
XX
DE   H86812-derived oligonucleotide SEQ ID 8608.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 8608; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 2 A; 3 C; 9 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        548 ACAAGCCCCTCAGCCGC 564
              ||||| |||||| ||||
Db         18 ACAAGGCCCTCAACCGC 2


RESULT 1578
ABD21980/c
ID   ABD21980 standard; DNA; 20 BP.
XX
AC   ABD21980;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human stanniocalcin-derived oligo SEQ ID 992.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 992; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
```

CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 6 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 212 AGATAGGCCTGGATGAG 228
|||| |||||| |||||
Db 17 AGATGGGCCTGTATGAG 1

RESULT 1579
ABD22500/c
ID ABD22500 standard; DNA; 20 BP.
XX
AC ABD22500;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human cathepsin C-derived oligo SEQ ID 1512.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 1512; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 58 TGACTGCTGAAACCCAG 74
||||||||||||| |||
Db 19 TGACTGCTGAAATACAG 3

RESULT 1580
ABD27560
ID ABD27560 standard; DNA; 20 BP.
XX
AC ABD27560;
XX
DT 29-JUL-2004 (first entry)
XX
DE AA504431-derived oligonucleotide SEQ ID 6572.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and

PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 6572; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1269 TGAGGAGACGTGGCCAG 1285
||||||.|||||||.|
Db 4 TGAGGACACGTGGCCTG 20

RESULT 1581
ABD25640/c
ID ABD25640 standard; DNA; 20 BP.
XX
AC ABD25640;
XX
DT 29-JUL-2004 (first entry)
XX
DE AI024215-derived oligonucleotide SEQ ID 4652.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 4652; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 6 A; 6 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 343 TTGAAGATGGGGTCTGA 359
|||||||||.||||||
Db 20 TTGAAGATGAAGTCTGA 4

RESULT 1582
ADO84907/c
ID ADO84907 standard; DNA; 20 BP.
XX
AC ADO84907;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human BRCA 1 and BRCA 2 mutation-related oligonucleotide probe SeqID12.
XX
KW mutation; BRCA 1; BRCA 2; diagnosis; breast cancer; ovarian cancer;
KW detection; predisposition; susceptibility; cancer; probe; ss; human.
XX
OS Homo sapiens.
XX

PN KR2003017894-A.
XX
PD 04-MAR-2003.
XX
PF 25-AUG-2001; 2001KR-00051510.
XX
PR 25-AUG-2001; 2001KR-00051510.
XX
PA (MYDN-) MYDNA CO LTD.
XX
PI Cho DY, Cho HM, Kang CS, Kim JG, Oh BG, Song GH, Yoon GS;
XX
DR WPI; 2003-501054/47.
XX
PT Mutations of BRCA 1 and BRCA 2 useful for diagnosis of breast and ovarian
PT cancers, and detection method of predisposition and susceptibility of the
PT cancers using the same.
XX
PS Claim 3; SEQ ID NO 12; 1pp; Korean.
XX
CC This invention relates to novel mutations of BRCA 1 and BRCA 2 genes
CC useful for the diagnosis of breast and ovarian cancers. In addition, the
CC invention also relates to a detection method of predisposition and
CC susceptibility of the cancers using the same. The present sequence is
CC that of an oligonucleotide probe which may be used for detection of the
CC human BRCA mutations of the invention.
XX
SQ Sequence 20 BP; 3 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 206 CTGAGCAGATAGGCCTG 222
||||| |||||| ||||
Db 19 CTGAGAAGATAGCCCTG 3

RESULT 1583
ADP75344
ID ADP75344 standard; DNA; 20 BP.
XX
AC ADP75344;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human endophilin 2 gene exon F reverse sequencing primer.
XX
KW Human; ss; primer; ADAM19; Endophilin 1; Endophilin 2; NRG2; ADAMTS2;
KW a disintegrin and metalloprotease; neuroregulin 2; SNP;
KW single nucleotide polymorphism;
KW a disintegrin and metalloprotease with thrombospondin type1 motif 2;
KW asthma; atopy; obesity; inflammatory bowel disease; respiratory disorder.
XX
OS Homo sapiens.
XX
PN WO2003031594-A2.
XX
PD 17-APR-2003.
XX
PF 11-OCT-2002; 2002WO-US032700.
XX
PR 11-OCT-2001; 2001US-0328424P.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.
XX
PI Keith T, Little RD, Van Eerdewegh P, Dupuis J, Del Mastro RG;
PI Allen K;
XX
DR WPI; 2003-381712/36.
XX
PT New isolated nucleic acid or alternate splice variant, useful for
PT diagnosing and treating a disintegrin and metalloprotease (ADAM) or
PT interactor gene-associated disorder, e.g. asthma, atopy, obesity or
PT inflammatory bowel disease.
XX
PS Claim 2; Page 127; 338pp; English.
XX
CC The invention relates to an isolated nucleic acid or alternate splice
CC variant comprising a nucleotide sequence containing at least one of the
CC single nucleotide polymorphisms given in the specification, a nucleotide
CC sequence having at least 15 contiguous nucleotides of them, or
CC complements of them. The genes are ADAM19 (a disintegrin and
CC metalloprotease 19, also known as gene 845), NRG2 (neuroregulin 2, also
CC known as gene 847), endophilin 1 (also known as gene 874), endophilin 2
CC (also known as gene 803) and ADAMTS2 (a disintegrin and metalloprotease
CC with thrombospondin type1 motif 2, also known as gene 962). Also included
CC are a vector comprising the isolated nucleic acid (or alternate splice
CC variant), a host cell containing the vector, an isolated polypeptide
CC encoded by the novel nucleic acid (or alternate splice variant), an
CC antibody or antibody fragment that binds to the polypeptide,
CC pharmaceutical compositions (comprising the nucleic acid or alternate
CC splice variant, vector, polypeptide or antibody , and a carrier,
CC excipient or diluent), a kit for detecting a disintegrin and
CC metalloprotease (ADAM) gene nucleotide sequence (comprising the isolated
CC nucleic acid or alternate splice variant, antibody or antibody fragment,
CC and at least one component to detect the hybridisation of the variant or
CC the binding of the antibody to an ADAM gene amino acid sequence), a kit
CC for detecting an interactor gene amino acid sequence (comprising the
CC antibody or antibody fragment, and at least one component to detect the
CC binding of the antibody to the interactor gene amino acid sequence),
CC diagnosing an ADAM or interactor gene-associated disorder or a
CC respiratory disorder in a human subject, determining an ADAM or
CC interactor gene pharmacogenetic profile in a human subject, identifying
CC an orthologue of a human ADAM or interactor gene, treating an ADAM or
CC interactor gene-associated disorder (or a respiratory disorder) by
CC administering the pharmaceutical composition, a transgenic mouse (whose
CC genome comprises an introduced null mutation in an endogenous gene that
CC is orthologous to a human ADAM gene), making a homozygous transgenic
CC knockout mouse, forming a crystal of the isolated polypeptide, a cell
CC line comprising the isolated nucleic acid or alternate splice variant, a
CC biochip comprising the isolated nucleic acid or alternate splice variant,
CC an isolated nucleic acid probe or primer comprising at least 8 contiguous
CC nucleotides of the nucleic acid, an isolated antisense nucleic acid,
CC identifying an ADAM or interactor gene ligand and an isolated nucleic
CC acid variant of Gene 803, 845, 847, 874 or 962. The nucleic acid or
CC alternate splice variants, methods, kits and antibody/antibody fragment
CC are useful for diagnosing and treating an ADAM or interactor gene-
CC associated disorder, e.g. asthma, atopy, obesity or inflammatory bowel
CC disease. The present sequence is a primer used to sequence the regions
CC surrounding polymorphisms in the above genes.
XX
SQ Sequence 20 BP; 4 A; 8 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1681 AACTACATCTTCCCTGC 1697
|| ||||||||||||
Db 2 AATGACATCTTCCCTGC 18

RESULT 1584
ADE64291
ID ADE64291 standard; DNA; 20 BP.
XX
AC ADE64291;
XX
DT 29-JAN-2004 (first entry)
XX
DE C. tropicalis CYP52A5A/B QC-RT-PCR primer #1.
XX
KW Yeast; ss; PCR; primer; NADPH reductase; CPR; cytochrome P450; CYP;
KW omega-hydroxylase; dicarboxylic acid; QC-RT PCR;
KW Quantitative competitive reverse transcriptase PCR.

```
XX
OS   Candida tropicalis.
XX
PN   US2003068800-A1.
XX
PD   10-APR-2003.
XX
PF   03-MAY-2002; 2002US-00138905.
XX
PR   01-MAY-1998;   98US-0083798P.
PR   05-OCT-1998;   98US-0103099P.
PR   10-MAR-1999;   99US-0123555P.
PR   30-APR-1999;   99US-00302620.
PR   12-OCT-2001; 2001US-00976800.
XX
PA   (WILS/) WILSON C R.
PA   (CRAF/) CRAFT D L.
PA   (EIRI/) EIRICH L D.
PA   (ESHO/) ESHOO M.
PA   (MADD/) MADDURI K M.
PA   (CORN/) CORNETT C A.
PA   (BREN/) BRENNER A A.
PA   (TANG/) TANG M.
PA   (LOPE/) LOPER J C.
PA   (GLEE/) GLEESON M.
XX
PI   Wilson CR, Craft DL, Eirich LD, Eshoo M, Madduri KM, Cornett CA;
PI   Brenner AA, Tang M, Loper JC, Gleeson M;
XX
DR   WPI; 2004-020205/02.
XX
PT   Novel isolated CPRA, CPRB, CYP52A1A, CYP52A2A, CYP52A2B, CYP52A3A,
PT   CYP52A3B, CYP52A5A, CYP52A5B, CYP52A8A, CYP52A8B or CYP52D4A protein,
PT   useful for increasing production of dicarboxylic acid in cells.
XX
PS   Example 11; SEQ ID NO 47; 195pp; English.
XX
CC   The invention relates to an isolated CPRA, CPRB, CYP52A1A, CYP52A2A,
CC   CYP52A2B, CYP52A3A, CYP52A3B, CYP52A5A, CYP52A5B, CYP52A8A, CYP52A8B or
CC   CYP52D4A protein (CYP - cytochrome P450, CPR - NADPH reductase) of the
CC   Candida tropicalis omega-hydroxylase complex. Also included are the
CC   nucleic aids encoding the CYP/CPR proteins (including their coding
CC   regions), a vector comprising the nucleotide acid, a host cell
CC   transfected or transformed with the vector, discriminating members of a
CC   gene family by quantifying the amount of target mRNA in a sample and
CC   increasing production of a dicarboxylic acid (comprising: providing a
CC   host cell having a naturally occurring CPR/CYP protein and culturing the
CC   host cell in media containing an organic substrate which upregulates the
CC   genes, to effect increased production of dicarboxylic acid). The CYP and
CC   CPR proteins, present in higher levels than normal is useful for
CC   increasing production of dicarboxylic acids. The present sequence is a
CC   Quantitative competitive reverse transcriptase PCR (QC-RT PCR) primer
CC   used to assay the levels of CYP/CPR mRNA in RNA samples.
XX
SQ   Sequence 20 BP; 7 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1010 AGAGGGGAGAGCTCAAG 1026
              |||||| || |||||||
Db          2 AGAGGGCAGGGCTCAAG 18


RESULT 1585
ADG86739/c
ID   ADG86739 standard; DNA; 20 BP.
XX
AC   ADG86739;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human APP-cleaving enzyme target region ISIS 140495.
XX
KW   ss; human; beta-site amyloid precursor protein; APP-cleaving enzyme;
KW   amyloid deposition; neurodegeneration; Alzheimer's disease; infection;
KW   inflammation; tumour.
XX
OS   Homo sapiens.
XX
PN   US2003224512-A1.
XX
PD   04-DEC-2003.
XX
PF   31-MAY-2002; 2002US-00159942.
XX
PR   31-MAY-2002; 2002US-00159942.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dobie KW;
XX
DR   WPI; 2004-051909/05.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding a
PT   beta-site amyloid precursor protein (APP)-cleaving enzyme, useful for
PT   treating diseases associated with beta-site APP-cleaving enzyme, e.g.
PT   neurodegeneration.
XX
PS   Example 15; SEQ ID NO 122; 58pp; English.
XX
CC   The invention relates to a compound targeted to a nucleic acid molecule
CC   encoding a beta-site amyloid precursor protein (APP)-cleaving enzyme. The
CC   antisense oligonucleotides and compounds are useful for inhibiting the
CC   expression of beta-site amyloid precursor protein (APP)-cleaving enzyme,
CC   modulating amyloid deposition in neurons, altering the expression of a
CC   splice variant of beta-site APP-cleaving enzyme, and for treating
CC   diseases or conditions associated with expression of beta-site APP-
CC   cleaving enzyme e.g. neurodegeneration or Alzheimer's disease. The
CC   antisense compounds are also useful as research reagents and kits, or in
CC   diagnostic, therapeutic and prophylaxis applications, e.g. to prevent or
CC   delay infection, inflammation or tumour formation. The present sequence
CC   represents a human APP-cleaving enzyme target region.
XX
SQ   Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        873 CCTGGATGACTGTGGGA 889
              | |||||||||||| ||
Db         17 CGTGGATGACTGTGAGA 1


RESULT 1586
ADG86683
ID   ADG86683 standard; DNA; 20 BP.
XX
AC   ADG86683;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human APP-cleaving enzyme antisense oligonucleotide ISIS 223841.
XX
KW   ss; human; beta-site amyloid precursor protein; APP-cleaving enzyme;
KW   amyloid deposition; neurodegeneration; Alzheimer's disease; infection;
KW   inflammation; tumour; antisense.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US2003224512-A1.
XX
PD   04-DEC-2003.
```

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XX
PF   31-MAY-2002; 2002US-00159942.
XX
PR   31-MAY-2002; 2002US-00159942.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dobie KW;
XX
DR   WPI; 2004-051909/05.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding a
PT   beta-site amyloid precursor protein (APP)-cleaving enzyme, useful for
PT   treating diseases associated with beta-site APP-cleaving enzyme, e.g.
PT   neurodegeneration.
XX
PS   Example 15; SEQ ID NO 66; 58pp; English.
XX
CC   The invention relates to a compound targeted to a nucleic acid molecule
CC   encoding a beta-site amyloid precursor protein (APP)-cleaving enzyme. The
CC   antisense oligonucleotides and compounds are useful for inhibiting the
CC   expression of beta-site amyloid precursor protein (APP)-cleaving enzyme,
CC   modulating amyloid deposition in neurons, altering the expression of a
CC   splice variant of beta-site APP-cleaving enzyme, and for treating
CC   diseases or conditions associated with expression of beta-site APP-
CC   cleaving enzyme e.g. neurodegeneration or Alzheimer's disease. The
CC   antisense compounds are also useful as research reagents and kits, or in
CC   diagnostic, therapeutic and prophylaxis applications, e.g. to prevent or
CC   delay infection, inflammation or tumour formation. The present sequence
CC   represents a human APP-cleaving enzyme antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        873 CCTGGATGACTGTGGGA 889
              | ||||||||||||| ||
Db          4 CGTGGATGACTGTGAGA 20


RESULT 1587
ADH27256
ID   ADH27256 standard; DNA; 20 BP.
XX
AC   ADH27256;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Ferritin related oligonucleotide Bin#3 structure 7.
XX
KW   detection; conserved structure; RNA structural element; fitness; ss.
XX
OS   Synthetic.
XX
PN   WO2003104478-A2.
XX
PD   18-DEC-2003.
XX
PF   10-JUN-2003; 2003WO-US018573.
XX
PR   10-JUN-2002; 2002US-0387342P.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Sampath R,  Ecker DJ,  Griffey RH,  Fogel GB,  Porto VW;
XX
DR   WPI; 2004-062371/06.
XX
PT   Detecting a conserved structures in an RNA sequence by generating an
PT   offspring group from the parent group and selecting at least one group
PT   from the parent and offspring groups with the highest fitness.
XX
PS   Example 1; Fig 11; 52pp; English.
XX
CC   The present invention describes a method for detecting a conserved
CC   structure in an RNA sequence. The method comprises: (a) placing 2
CC   structures from structures generated for 2 RNA sequences from 2 organisms
CC   into a parent group; (b) generating an offspring group from the parent
CC   group; (c) determining fitness of the parent and offspring groups; (d)
CC   comparing the fitness of the parent and offspring groups; and (e)
CC   selecting at least one group from the parent and offspring groups with
CC   the highest fitness, where the conserved structure in the RNA is present
CC   within the at least one group. The method is useful for detecting a
CC   conserved structure in an RNA sequence. The present sequence is used in
CC   the exemplification of the present invention.
XX
SQ   Sequence 20 BP; 4 A; 6 C; 8 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1223 TGGAGGAACAGCTACAC 1239
              ||||||| ||||| |||
Db          2 TGGAGGAGCAGCTCCAC 18


RESULT 1588
ADG72117/c
ID   ADG72117 standard; DNA; 20 BP.
XX
AC   ADG72117;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Mouse SREBP-1 antisense oligonucleotide ISIS 219655.
XX
KW   Sterol regulatory element-binding protein-1; SREBP-1; ss; mouse;
KW   antisense gene therapy;
KW   sterol regulatory element-binding transcription factor; SREBF;
KW   metabolic disorder; diabetes; cardiovascular disorder; atherosclerosis;
KW   hyperlipidaemia.
XX
OS   Mus musculus.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethtyl residues"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl residues"
XX
PN   US2003224515-A1.
XX
PD   04-DEC-2003.
XX
PF   04-JUN-2002; 2002US-00161996.
XX
PR   04-JUN-2002; 2002US-00161996.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Freier SM,  Baker BF,  Dobie KW;
XX
DR   WPI; 2004-022079/02.
XX
```

```
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding sterol regulatory element-binding protein-1, useful
PT   for treating diabetes, atherosclerosis or hyperlipidemia.
XX
PS   Example 16; SEQ ID NO 112; 112pp; English.
XX
CC   The invention relates to a compound 8-80 nucleobases in length targeted
CC   to, and which specifically hybridises with a nucleic acid molecule
CC   encoding sterol regulatory element-binding protein-1 (SREBP-1, also known
CC   as sterol regulatory element-binding transcription factor, SREBF), and
CC   inhibits the expression of SREBP-1, i.e. is an antisense oligonucleotide.
CC   Also included are a compound 8-80 nucleobases in length that specifically
CC   hybridises with at least an 8-nucleobase portion of an active site on a
CC   nucleic acid molecule encoding sterol regulatory element-binding protein-
CC   1, a composition comprising the compound and a carrier or diluent,
CC   inhibiting the expression of sterol regulatory element-binding protein-1
CC   in cells or tissues (by contacting the cells or tissues with the compound
CC   so that expression of sterol regulatory element-binding protein-1 is
CC   inhibited) and treating an animal having a disease or condition
CC   associated with sterol regulatory element-binding protein-1 by
CC   administering to the animal a therapeutic or prophylactic amount of the
CC   compound so that expression of sterol regulatory element-binding protein-
CC   1 is inhibited. The antisense oligonucleotide comprises at least one
CC   modified internucleoside linkage (preferably a phosphorothioate linkage),
CC   at least one modified sugar moiety (preferably 2'-O-methoxyethyl sugar
CC   moiety) or at least one modified nucleobase (preferably 5-
CC   methylcytosine). The compound, composition and methods are useful for
CC   treating a disease or condition associated with sterol regulatory element
CC   -binding protein-1, such as a metabolic disorder e.g. diabetes, or a
CC   cardiovascular disorder, e.g. atherosclerosis or hyperlipidaemia. They
CC   are also useful in research and diagnostics for modulating the expression
CC   of sterol regulatory element-binding protein-1. The present sequence is
CC   an antisense oligonucleotide targeting mouse SREBP-1.
XX
SQ   Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        240 TGGCGGCAGTGACCCTG 256
              ||| ||||||||| |||
Db         20 TGGTGGCAGTGACTCTG 4


RESULT 1589
ADG72234
ID   ADG72234 standard; cDNA; 20 BP.
XX
AC   ADG72234;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Mouse SREBP-1 target site #3.
XX
KW   Sterol regulatory element-binding protein-1; SREBP-1; ss; mouse;
KW   antisense gene therapy;
KW   sterol regulatory element-binding transcription factor; SREBF;
KW   metabolic disorder; diabetes; cardiovascular disorder; atherosclerosis;
KW   hyperlipidaemia.
XX
OS   Mus musculus.
XX
PN   US2003224515-A1.
XX
PD   04-DEC-2003.
XX
PF   04-JUN-2002; 2002US-00161996.
XX
PR   04-JUN-2002; 2002US-00161996.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Freier SM,  Baker BF,  Dobie KW;
XX
DR   WPI; 2004-022079/02.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding sterol regulatory element-binding protein-1, useful
PT   for treating diabetes, atherosclerosis or hyperlipidemia.
XX
PS   Example 16; SEQ ID NO 229; 112pp; English.
XX
CC   The invention relates to a compound 8-80 nucleobases in length targeted
CC   to, and which specifically hybridises with a nucleic acid molecule
CC   encoding sterol regulatory element-binding protein-1 (SREBP-1, also known
CC   as sterol regulatory element-binding transcription factor, SREBF), and
CC   inhibits the expression of SREBP-1, i.e. is an antisense oligonucleotide.
CC   Also included are a compound 8-80 nucleobases in length that specifically
CC   hybridises with at least an 8-nucleobase portion of an active site on a
CC   nucleic acid molecule encoding sterol regulatory element-binding protein-
CC   1, a composition comprising the compound and a carrier or diluent,
CC   inhibiting the expression of sterol regulatory element-binding protein-1
CC   in cells or tissues (by contacting the cells or tissues with the compound
CC   so that expression of sterol regulatory element-binding protein-1 is
CC   inhibited) and treating an animal having a disease or condition
CC   associated with sterol regulatory element-binding protein-1 by
CC   administering to the animal a therapeutic or prophylactic amount of the
CC   compound so that expression of sterol regulatory element-binding protein-
CC   1 is inhibited. The antisense oligonucleotide comprises at least one
CC   modified internucleoside linkage (preferably a phosphorothioate linkage),
CC   at least one modified sugar moiety (preferably 2'-O-methoxyethyl sugar
CC   moiety) or at least one modified nucleobase (preferably 5-
CC   methylcytosine). The compound, composition and methods are useful for
CC   treating a disease or condition associated with sterol regulatory element
CC   -binding protein-1, such as a metabolic disorder e.g. diabetes, or a
CC   cardiovascular disorder, e.g. atherosclerosis or hyperlipidaemia. They
CC   are also useful in research and diagnostics for modulating the expression
CC   of sterol regulatory element-binding protein-1. The present sequence is a
CC   mouse SREBP-1 target region for the antisense oligonucleotides.
XX
SQ   Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1729 CACCTGCCCACTTGTCC 1745
              ||||||| | |||||||
Db          4 CACCTGCACCCTTGTCC 20


RESULT 1590
ADG72049
ID   ADG72049 standard; DNA; 20 BP.
XX
AC   ADG72049;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human SREBP-1 antisense oligonucleotide ISIS 220046.
XX
KW   Sterol regulatory element-binding protein-1; SREBP-1; ss; human;
KW   antisense gene therapy;
KW   sterol regulatory element-binding transcription factor; SREBF;
KW   metabolic disorder; diabetes; cardiovascular disorder; atherosclerosis;
KW   hyperlipidaemia.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate linkages. All cytidines are 5-
FT                    methylcytidines"
```

```
FT   modified_base   1. .5
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethtyl residues"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl residues"
XX
PN   US2003224515-A1.
XX
PD   04-DEC-2003.
XX
PF   04-JUN-2002; 2002US-00161996.
XX
PR   04-JUN-2002; 2002US-00161996.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Freier SM,  Baker BF,  Dobie KW;
XX
DR   WPI; 2004-022079/02.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding sterol regulatory element-binding protein-1, useful
PT   for treating diabetes, atherosclerosis or hyperlipidemia.
XX
PS   Example 15; SEQ ID NO 44; 112pp; English.
XX
CC   The invention relates to a compound 8-80 nucleobases in length targeted
CC   to, and which specifically hybridises with a nucleic acid molecule
CC   encoding sterol regulatory element-binding protein-1 (SREBP-1, also known
CC   as sterol regulatory element-binding transcription factor, SREBF), and
CC   inhibits the expression of SREBP-1, i.e. is an antisense oligonucleotide.
CC   Also included are a compound 8-80 nucleobases in length that specifically
CC   hybridises with at least an 8-nucleobase portion of an active site on a
CC   nucleic acid molecule encoding sterol regulatory element-binding protein-
CC   1, a composition comprising the compound and a carrier or diluent,
CC   inhibiting the expression of sterol regulatory element-binding protein-1
CC   in cells or tissues (by contacting the cells or tissues with the compound
CC   so that expression of sterol regulatory element-binding protein-1 is
CC   inhibited) and treating an animal having a disease or condition
CC   associated with sterol regulatory element-binding protein-1 by
CC   administering to the animal a therapeutic or prophylactic amount of the
CC   compound so that expression of sterol regulatory element-binding protein-
CC   1 is inhibited. The antisense oligonucleotide comprises at least one
CC   modified internucleoside linkage (preferably a phosphorothioate linkage),
CC   at least one modified sugar moiety (preferably 2'-O-methoxyethyl sugar
CC   moiety) or at least one modified nucleobase (preferably 5-
CC   methylcytosine). The compound, composition and methods are useful for
CC   treating a disease or condition associated with sterol regulatory element
CC   -binding protein-1, such as a metabolic disorder e.g. diabetes, or a
CC   cardiovascular disorder, e.g. atherosclerosis or hyperlipidaemia. They
CC   are also useful in research and diagnostics for modulating the expression
CC   of sterol regulatory element-binding protein-1. The present sequence is
CC   an antisense oligonucleotide targeting human SREBP-1.
XX
SQ   Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        505 GAGGGCTACCTGGAGAA 521
              ||||||| |||| ||||
Db          2 GAGGGCTTCCTGCAGAA 18


RESULT 1591
ADG72186/c
ID   ADG72186 standard; DNA; 20 BP.
XX
AC   ADG72186;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human SREBP-1 target site #23.
XX
KW   Sterol regulatory element-binding protein-1; SREBP-1; ds; human;
KW   antisense gene therapy;
KW   sterol regulatory element-binding transcription factor; SREBF;
KW   metabolic disorder; diabetes; cardiovascular disorder; atherosclerosis;
KW   hyperlipidaemia.
XX
OS   Homo sapiens.
XX
PN   US2003224515-A1.
XX
PD   04-DEC-2003.
XX
PF   04-JUN-2002; 2002US-00161996.
XX
PR   04-JUN-2002; 2002US-00161996.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Freier SM,  Baker BF,  Dobie KW;
XX
DR   WPI; 2004-022079/02.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding sterol regulatory element-binding protein-1, useful
PT   for treating diabetes, atherosclerosis or hyperlipidemia.
XX
PS   Example 16; SEQ ID NO 181; 112pp; English.
XX
CC   The invention relates to a compound 8-80 nucleobases in length targeted
CC   to, and which specifically hybridises with a nucleic acid molecule
CC   encoding sterol regulatory element-binding protein-1 (SREBP-1, also known
CC   as sterol regulatory element-binding transcription factor, SREBF), and
CC   inhibits the expression of SREBP-1, i.e. is an antisense oligonucleotide.
CC   Also included are a compound 8-80 nucleobases in length that specifically
CC   hybridises with at least an 8-nucleobase portion of an active site on a
CC   nucleic acid molecule encoding sterol regulatory element-binding protein-
CC   1, a composition comprising the compound and a carrier or diluent,
CC   inhibiting the expression of sterol regulatory element-binding protein-1
CC   in cells or tissues (by contacting the cells or tissues with the compound
CC   so that expression of sterol regulatory element-binding protein-1 is
CC   inhibited) and treating an animal having a disease or condition
CC   associated with sterol regulatory element-binding protein-1 by
CC   administering to the animal a therapeutic or prophylactic amount of the
CC   compound so that expression of sterol regulatory element-binding protein-
CC   1 is inhibited. The antisense oligonucleotide comprises at least one
CC   modified internucleoside linkage (preferably a phosphorothioate linkage),
CC   at least one modified sugar moiety (preferably 2'-O-methoxyethyl sugar
CC   moiety) or at least one modified nucleobase (preferably 5-
CC   methylcytosine). The compound, composition and methods are useful for
CC   treating a disease or condition associated with sterol regulatory element
CC   -binding protein-1, such as a metabolic disorder e.g. diabetes, or a
CC   cardiovascular disorder, e.g. atherosclerosis or hyperlipidaemia. They
CC   are also useful in research and diagnostics for modulating the expression
CC   of sterol regulatory element-binding protein-1. The present sequence is a
CC   human SREBP-1 target region for the antisense oligonucleotides.
XX
SQ   Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        505 GAGGGCTACCTGGAGAA 521
              ||||||| |||| ||||
Db         19 GAGGGCTTCCTGCAGAA 3


RESULT 1592
```

```
ADG72110/c
ID   ADG72110 standard; DNA; 20 BP.
XX
AC   ADG72110;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Mouse SREBP-1 antisense oligonucleotide ISIS 219640.
XX
KW   Sterol regulatory element-binding protein-1; SREBP-1; ss; mouse;
KW   antisense gene therapy;
KW   sterol regulatory element-binding transcription factor; SREBF;
KW   metabolic disorder; diabetes; cardiovascular disorder; atherosclerosis;
KW   hyperlipidaemia.
XX
OS   Mus musculus.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytidines are 5-
FT                   methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethtyl residues"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl residues"
XX
PN   US2003224515-A1.
XX
PD   04-DEC-2003.
XX
PF   04-JUN-2002; 2002US-00161996.
XX
PR   04-JUN-2002; 2002US-00161996.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Freier SM,  Baker BF,  Dobie KW;
XX
DR   WPI; 2004-022079/02.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding sterol regulatory element-binding protein-1, useful
PT   for treating diabetes, atherosclerosis or hyperlipidemia.
XX
PS   Example 16; SEQ ID NO 105; 112pp; English.
XX
CC   The invention relates to a compound 8-80 nucleobases in length targeted
CC   to, and which specifically hybridises with a nucleic acid molecule
CC   encoding sterol regulatory element-binding protein-1 (SREBP-1, also known
CC   as sterol regulatory element-binding transcription factor, SREBF), and
CC   inhibits the expression of SREBP-1, i.e. is an antisense oligonucleotide.
CC   Also included are a compound 8-80 nucleobases in length that specifically
CC   hybridises with at least an 8-nucleobase portion of an active site on a
CC   nucleic acid molecule encoding sterol regulatory element-binding protein-
CC   1, a composition comprising the compound and a carrier or diluent,
CC   inhibiting the expression of sterol regulatory element-binding protein-1
CC   in cells or tissues (by contacting the cells or tissues with the compound
CC   so that expression of sterol regulatory element-binding protein-1 is
CC   inhibited) and treating an animal having a disease or condition
CC   associated with sterol regulatory element-binding protein-1 by
CC   administering to the animal a therapeutic or prophylactic amount of the
CC   compound so that expression of sterol regulatory element-binding protein-
CC   1 is inhibited. The antisense oligonucleotide comprises at least one
CC   modified internucleoside linkage (preferably a phosphorothioate linkage),
CC   at least one modified sugar moiety (preferably 2'-O-methoxyethyl sugar
CC   moiety) or at least one modified nucleobase (preferably 5-
CC   methylcytosine). The compound, composition and methods are useful for
CC   treating a disease or condition associated with sterol regulatory element
CC   -binding protein-1, such as a metabolic disorder e.g. diabetes, or a
CC   cardiovascular disorder, e.g. atherosclerosis or hyperlipidaemia. They
CC   are also useful in research and diagnostics for modulating the expression
CC   of sterol regulatory element-binding protein-1. The present sequence is
CC   an antisense oligonucleotide targeting mouse SREBP-1.
XX
SQ   Sequence 20 BP; 5 A; 3 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1729 CACCTGCCCACTTGTCC 1745
              ||||||| | |||||||
Db         17 CACCTGCACCCTTGTCC 1

RESULT 1593
ADG72241
ID   ADG72241 standard; cDNA; 20 BP.
XX
AC   ADG72241;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Mouse SREBP-1 target site #10.
XX
KW   Sterol regulatory element-binding protein-1; SREBP-1; ss; mouse;
KW   antisense gene therapy;
KW   sterol regulatory element-binding transcription factor; SREBF;
KW   metabolic disorder; diabetes; cardiovascular disorder; atherosclerosis;
KW   hyperlipidaemia.
XX
OS   Mus musculus.
XX
PN   US2003224515-A1.
XX
PD   04-DEC-2003.
XX
PF   04-JUN-2002; 2002US-00161996.
XX
PR   04-JUN-2002; 2002US-00161996.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Freier SM,  Baker BF,  Dobie KW;
XX
DR   WPI; 2004-022079/02.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding sterol regulatory element-binding protein-1, useful
PT   for treating diabetes, atherosclerosis or hyperlipidemia.
XX
PS   Example 16; SEQ ID NO 236; 112pp; English.
XX
CC   The invention relates to a compound 8-80 nucleobases in length targeted
CC   to, and which specifically hybridises with a nucleic acid molecule
CC   encoding sterol regulatory element-binding protein-1 (SREBP-1, also known
CC   as sterol regulatory element-binding transcription factor, SREBF), and
CC   inhibits the expression of SREBP-1, i.e. is an antisense oligonucleotide.
CC   Also included are a compound 8-80 nucleobases in length that specifically
CC   hybridises with at least an 8-nucleobase portion of an active site on a
CC   nucleic acid molecule encoding sterol regulatory element-binding protein-
CC   1, a composition comprising the compound and a carrier or diluent,
CC   inhibiting the expression of sterol regulatory element-binding protein-1
CC   in cells or tissues (by contacting the cells or tissues with the compound
CC   so that expression of sterol regulatory element-binding protein-1 is
CC   inhibited) and treating an animal having a disease or condition
CC   associated with sterol regulatory element-binding protein-1 by
CC   administering to the animal a therapeutic or prophylactic amount of the
CC   compound so that expression of sterol regulatory element-binding protein-
CC   1 is inhibited. The antisense oligonucleotide comprises at least one
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CC   modified internucleoside linkage (preferably a phosphorothioate linkage),
CC   at least one modified sugar moiety (preferably 2'-O-methoxyethyl sugar
CC   moiety) or at least one modified nucleobase (preferably 5-
CC   methylcytosine). The compound, composition and methods are useful for
CC   treating a disease or condition associated with sterol regulatory element
CC   -binding protein-1, such as a metabolic disorder e.g. diabetes, or a
CC   cardiovascular disorder, e.g. atherosclerosis or hyperlipidaemia. They
CC   are also useful in research and diagnostics for modulating the expression
CC   of sterol regulatory element-binding protein-1. The present sequence is a
CC   mouse SREBP-1 target region for the antisense oligonucleotides.
XX
SQ   Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        240 TGGCGGCAGTGACCCTG 256
              ||| ||||||||| |||
Db          1 TGGTGGCAGTGACTCTG 17


RESULT 1594
ADH67282/c
ID   ADH67282 standard; DNA; 20 BP.
XX
AC   ADH67282;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human glucocorticoid receptor-specific antisense oligonucleotide #4116.
XX
KW   antisense oligonucleotide; glucocorticoid receptor; infection;
KW   inflammation; tumour formation; diabetes; obesity;
KW   cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW   phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS   Homo sapiens.
XX
PN   WO2003099215-A2.
XX
PD   04-DEC-2003.
XX
PF   20-MAY-2003; 2003WO-US016084.
XX
PR   20-MAY-2002; 2002US-0381857P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Crosby SD,  Nalseth AE;
XX
DR   WPI; 2004-035034/03.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT   cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS   Claim 4; SEQ ID NO 4116; 985pp; English.
XX
CC   The invention comprises an antisense oligonucleotides that are targeted
CC   to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC   antisense oligonucleotides of the invention are useful for preventing or
CC   delaying infection, inflammation or tumour formation. The antisense
CC   oligonucleotides are also useful for treating diabetes, obesity,
CC   cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC   present DNA sequence represents an antisense oligonucleotide that targets
CC   the human glucocorticoid receptor gene. NOTE: The present sequence
CC   contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 5 A; 5 C; 8 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         49 CCAGCAGTGTGACTGCT 65
              |||||||||||  ||||
Db         18 CCAGCAGTGTGCTTGCT 2


RESULT 1595
ADH66928/c
ID   ADH66928 standard; DNA; 20 BP.
XX
AC   ADH66928;
XX
DT   25-MAR-2004  (first entry)
XX
DE   Human glucocorticoid receptor-specific antisense oligonucleotide #3762.
XX
KW   antisense oligonucleotide; glucocorticoid receptor; infection;
KW   inflammation; tumour formation; diabetes; obesity;
KW   cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss;
KW   phosphorothioate backbone; 2'-methoxyethyl; 2'-MOE.
XX
OS   Homo sapiens.
XX
PN   WO2003099215-A2.
XX
PD   04-DEC-2003.
XX
PF   20-MAY-2003; 2003WO-US016084.
XX
PR   20-MAY-2002; 2002US-0381857P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Crosby SD,  Nalseth AE;
XX
DR   WPI; 2004-035034/03.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   mammalian glucocorticoid receptor, useful for treating diabetes, obesity,
PT   cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
XX
PS   Claim 4; SEQ ID NO 3762; 985pp; English.
XX
CC   The invention comprises an antisense oligonucleotides that are targeted
CC   to nucleic acids encoding a mammalian glucocorticoid receptor. The
CC   antisense oligonucleotides of the invention are useful for preventing or
CC   delaying infection, inflammation or tumour formation. The antisense
CC   oligonucleotides are also useful for treating diabetes, obesity,
CC   cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The
CC   present DNA sequence represents an antisense oligonucleotide that targets
CC   the human glucocorticoid receptor gene. NOTE: The present sequence
CC   contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         49 CCAGCAGTGTGACTGCT 65
              |||||||||||  ||||
Db         17 CCAGCAGTGTGCTTGCT 1


RESULT 1596
ADH54740/c
ID   ADH54740 standard; DNA; 20 BP.
XX
AC   ADH54740;
XX
DT   25-MAR-2004  (first entry)
XX
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DE   Human VEGF-C antisense oligonucleotide ISIS 158128.
XX
KW   human; ss; VEGF-C; cardiovascular disorder; atherosclerosis;
KW   diabetic retinopathy; autoimmune disorder; inflammatory disorder;
KW   vascular endothelial growth factor; antisense.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US2003232437-A1.
XX
PD   18-DEC-2003.
XX
PF   17-JUN-2002; 2002US-00173718.
XX
PR   17-JUN-2002; 2002US-00173718.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Zhang H,  Dobie KW;
XX
DR   WPI; 2004-061284/06.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding vascular endothelial growth factor-C (VEGF-C),
PT   useful for treating atherosclerosis, diabetic retinopathy, or
PT   inflammatory disorders.
XX
PS   Example 15; SEQ ID NO 41; 83pp; English.
XX
CC   The invention relates to a compound targeted to and which specifically
CC   hybridises with a nucleic acid molecule encoding VEGF-C, and inhibits the
CC   expression of VEGF-C. The compound, composition and methods are useful
CC   for treating a disease or condition associated with VEGF-C, such as a
CC   cardiovascular disorder e.g. atherosclerosis or diabetic retinopathy or
CC   an autoimmune or inflammatory disorder. They are also useful in research
CC   and diagnostics for modulating the expression of VEGF-C. The present
CC   sequence represents a human VEGF-C antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1564 ATGCCTGACTCAGGCAG 1580
              ||||||| |||||| ||
Db         20 ATGCCTGGCTCAGGAAG 4


RESULT 1597
ADH89647/c
ID   ADH89647 standard; DNA; 20 BP.
XX
AC   ADH89647;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human Livin target region ISIS 123483.
XX
KW   hyperproliferative disorder; aberrant apoptosis; human; ss; Livin.
XX
OS   Homo sapiens.
XX
PN   US2004005565-A1.
XX
PD   08-JAN-2004.
XX
PF   02-JUL-2002; 2002US-00188646.
XX
PR   02-JUL-2002; 2002US-00188646.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Dobie KW;
XX
DR   WPI; 2004-098436/10.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding Livin, useful for preparing a composition for treating
PT   hyperproliferative disorder or aberrant apoptosis.
XX
PS   Example 15; SEQ ID NO 116; 60pp; English.
XX
CC   The invention relates to an antisense oligonucleotide targeted to a
CC   nucleic acid encoding Livin and that specifically hybridises with the
CC   nucleic acid encoding Livin and inhibits expression of Livin. The
CC   antisense oligonucleotide is useful for preparing a composition for
CC   treating hyperproliferative disorder or aberrant apoptosis. The present
CC   sequence represents a human livin target region.
XX
SQ   Sequence 20 BP; 2 A; 5 C; 9 G; 4 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1629 CCCCAGCAGGCAGCGGC 1645
              || |||||| |||||||
Db         18 CCTCAGCAGTCAGCGGC 2


RESULT 1598
ADH89572
ID   ADH89572 standard; DNA; 20 BP.
XX
AC   ADH89572;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human Livin antisense oligonucleotide ISIS 205823.
XX
KW   hyperproliferative disorder; aberrant apoptosis; human; ss; Livin;
KW   antisense.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   US2004005565-A1.
XX
PD   08-JAN-2004.
XX
PF   02-JUL-2002; 2002US-00188646.
XX
PR   02-JUL-2002; 2002US-00188646.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Dobie KW;
XX
DR   WPI; 2004-098436/10.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding Livin, useful for preparing a composition for treating
PT   hyperproliferative disorder or aberrant apoptosis.
XX
PS   Example 15; SEQ ID NO 41; 60pp; English.
XX
CC   The invention relates to an antisense oligonucleotide targeted to a
CC   nucleic acid encoding Livin and that specifically hybridises with the
CC   nucleic acid encoding Livin and inhibits expression of Livin. The
CC   antisense oligonucleotide is useful for preparing a composition for
CC   treating hyperproliferative disorder or aberrant apoptosis. The present
CC   sequence represents a human livin antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 4 A; 9 C; 5 G; 2 T; 0 U; 0 Other;
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```
  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1629 CCCCAGCAGGCAGCGGC 1645
              || |||||| |||||||
Db          3 CCTCAGCAGTCAGCGGC 19


RESULT 1599
ADI79577
ID   ADI79577 standard; DNA; 20 BP.
XX
AC   ADI79577;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human HMG-CoA reductase antisense oligonucleotide, SEQ ID No 100.
XX
KW   HMG-CoA reductase; 3-hydroxy-3-methylglutaryl-Coenzyme A;
KW   HMG-CoA reductase; cardiant; antiarteriosclerotic; antilipaemic;
KW   antisense gene therapy; cardiovascular disorder; cholesterol metabolism;
KW   human; ss.
XX
OS   Homo sapiens.
XX
PN   US2004006031-A1.
XX
PD   08-JAN-2004.
XX
PF   02-JUL-2002; 2002US-00190366.
XX
PR   02-JUL-2002; 2002US-00190366.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Freier SM,  Dobie KW;
XX
DR   WPI; 2004-081743/08.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding HMG-CoA reductase, useful for treating
PT   atherosclerosis, or a disease involving cholesterol metabolism or
PT   angiogenesis.
XX
PS   Example 15; SEQ ID NO 100; 110pp; English.
XX
CC   The invention relates to novel compounds of 8-80 nucleobases in length
CC   targeted to, and which specifically hybridises with, a nucleic acid
CC   molecule encoding 3-hydroxy-3-methylglutaryl-Coenzyme A (HMG-CoA)
CC   reductase, and inhibits the expression of HMG-CoA reductase. The novel
CC   compounds have cardiant, antiarteriosclerotic, and antilipaemic
CC   activities. The compound can be used to treat disorders by antisense gene
CC   therapy. The compounds, compositions and methods are useful for treating
CC   a disease or condition associated with HMG-CoA reductase, such as a
CC   cardiovascular disorder e.g. atherosclerosis, or a disease or condition
CC   involving cholesterol metabolism. They are also useful in research and
CC   diagnostics for modulating the expression of HMG-CoA reductase. This
CC   polynucleotide sequence represents an antisense oligonucleotide of the
CC   invention.
XX
SQ   Sequence 20 BP; 7 A; 10 C; 1 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        465 CAACAAGCGCCTATCAC 481
              ||||||||  || |||||
Db          3 CAACAAGCTCCCATCAC 19


RESULT 1600
ADI79774/c
ID   ADI79774 standard; DNA; 20 BP.
XX
AC   ADI79774;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human HMG-CoA reductase antisense oligonucleotide, SEQ ID No 297.
XX
KW   HMG-CoA reductase; 3-hydroxy-3-methylglutaryl-Coenzyme A;
KW   HMG-CoA reductase; cardiant; antiarteriosclerotic; antilipaemic;
KW   antisense gene therapy; cardiovascular disorder; cholesterol metabolism;
KW   human; ss.
XX
OS   Homo sapiens.
XX
PN   US2004006031-A1.
XX
PD   08-JAN-2004.
XX
PF   02-JUL-2002; 2002US-00190366.
XX
PR   02-JUL-2002; 2002US-00190366.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Freier SM,  Dobie KW;
XX
DR   WPI; 2004-081743/08.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding HMG-CoA reductase, useful for treating
PT   atherosclerosis, or a disease involving cholesterol metabolism or
PT   angiogenesis.
XX
PS   Example 16; SEQ ID NO 297; 110pp; English.
XX
CC   The invention relates to novel compounds of 8-80 nucleobases in length
CC   targeted to, and which specifically hybridises with, a nucleic acid
CC   molecule encoding 3-hydroxy-3-methylglutaryl-Coenzyme A (HMG-CoA)
CC   reductase, and inhibits the expression of HMG-CoA reductase. The novel
CC   compounds have cardiant, antiarteriosclerotic, and antilipaemic
CC   activities. The compound can be used to treat disorders by antisense gene
CC   therapy. The compounds, compositions and methods are useful for treating
CC   a disease or condition associated with HMG-CoA reductase, such as a
CC   cardiovascular disorder e.g. atherosclerosis, or a disease or condition
CC   involving cholesterol metabolism. They are also useful in research and
CC   diagnostics for modulating the expression of HMG-CoA reductase. This
CC   polynucleotide sequence represents an antisense oligonucleotide of the
CC   invention.
XX
SQ   Sequence 20 BP; 2 A; 1 C; 10 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        465 CAACAAGCGCCTATCAC 481
              ||||||||  || |||||
Db         18 CAACAAGCTCCCATCAC 2


RESULT 1601
ADI38820
ID   ADI38820 standard; DNA; 20 BP.
XX
AC   ADI38820;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human LIM domain kinase 1 antisense oligonucleotide #104.
XX
```

```
KW   neuroprotective; LIM domain kinase 1; developmental disorder;
KW   neurological disorder; diagnostic; prophylaxis; human; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004014047-A1.
XX
PD   22-JAN-2004.
XX
PF   18-JUL-2002; 2002US-00199199.
XX
PR   18-JUL-2002; 2002US-00199199.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Cowsert LM,  Dobie KW;
XX
DR   WPI; 2004-121553/12.
XX
PT   New antisense oligonucleotides for modulating LIM domain kinase 1
PT   expression, useful for diagnosing, preventing or treating conditions
PT   associated with the kinase, e.g. neurological or developmental disorders.
XX
PS   Example 15; SEQ ID NO 119; 81pp; English.
XX
CC   The invention describes a compound 8-80 nucleobases in length targeted to
CC   a nucleic acid molecule encoding LIM domain kinase 1. The compound
CC   specifically hybridises with the nucleic acid molecule encoding LIM
CC   domain kinase 1 and inhibits the expression of LIM domain kinase 1. It
CC   specifically hybridises with at least an 8-nucleobase portion of a
CC   preferred target region on the nucleic acid molecule encoding LIM domain
CC   kinase 1. The antisense oligonucleotide is useful for modulating the
CC   expression of LIM domain kinase 1 in cells or tissues to treat diseases
CC   associated with their expression, such as a developmental disorder or a
CC   neurological disorder. In addition, the compound is used for diagnostics,
CC   prophylaxis, or as research reagents or kits. This sequence represents a
CC   human LIM domain kinase 1 antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 4 A; 9 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        760 TCCCTGCTCAAGGACCT 776
              |||| || |||||||||
Db          4 TCCCAGCGCAAGGACCT 20


RESULT 1602
ADI38749/c
ID   ADI38749 standard; DNA; 20 BP.
XX
AC   ADI38749;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human LIM domain kinase 1 antisense oligonucleotide #33.
XX
KW   neuroprotective; LIM domain kinase 1; developmental disorder;
KW   neurological disorder; diagnostic; prophylaxis; human; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004014047-A1.
XX
PD   22-JAN-2004.
XX
PF   18-JUL-2002; 2002US-00199199.
XX
PR   18-JUL-2002; 2002US-00199199.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Cowsert LM,  Dobie KW;
XX
DR   WPI; 2004-121553/12.
XX
PT   New antisense oligonucleotides for modulating LIM domain kinase 1
PT   expression, useful for diagnosing, preventing or treating conditions
PT   associated with the kinase, e.g. neurological or developmental disorders.
XX
PS   Example 15; SEQ ID NO 48; 81pp; English.
XX
CC   The invention describes a compound 8-80 nucleobases in length targeted to
CC   a nucleic acid molecule encoding LIM domain kinase 1. The compound
CC   specifically hybridises with the nucleic acid molecule encoding LIM
CC   domain kinase 1 and inhibits the expression of LIM domain kinase 1. It
CC   specifically hybridises with at least an 8-nucleobase portion of a
CC   preferred target region on the nucleic acid molecule encoding LIM domain
CC   kinase 1. The antisense oligonucleotide is useful for modulating the
CC   expression of LIM domain kinase 1 in cells or tissues to treat diseases
CC   associated with their expression, such as a developmental disorder or a
CC   neurological disorder. In addition, the compound is used for diagnostics,
CC   prophylaxis, or as research reagents or kits. This sequence represents a
CC   human LIM domain kinase 1 antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 2 A; 5 C; 9 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        760 TCCCTGCTCAAGGACCT 776
              |||| || |||||||||
Db         17 TCCCAGCGCAAGGACCT 1


RESULT 1603
ADI38608
ID   ADI38608 standard; DNA; 20 BP.
XX
AC   ADI38608;
XX
DT   22-APR-2004  (first entry)
XX
```

```
DE   Dual specific phosphatase 6 antisense oligonucleotide #17.
XX
KW   cytostatic; antiinflammatory; antisense therapy;
KW   dual specific phosphatase 6; hyperproliferative disorder; apoptosis;
KW   inflammatory disorder; developmental disorder; diagnostic; prophylaxis;
KW   human; antisense technology; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004014048-A1.
XX
PD   22-JAN-2004.
XX
PF   18-JUL-2002; 2002US-00199221.
XX
PR   18-JUL-2002; 2002US-00199221.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Cowsert LM,  Dobie KW;
XX
DR   WPI; 2004-121554/12.
XX
PT   New antisense oligonucleotides for modulating dual specific phosphatase 6
PT   expression, useful for diagnosing, preventing or treating conditions
PT   associated with the phosphatase, e.g. hyperproliferative or inflammatory
PT   disorders.
XX
PS   Example 15; SEQ ID NO 29; 54pp; English.
XX
CC   The invention describes a compound 8-80 nucleobases in length targeted to
CC   a nucleic acid molecule encoding dual specific phosphatase 6. The
CC   compound specifically hybridises with the nucleic acid molecule encoding
CC   dual specific phosphatase 6 and inhibits the expression of dual specific
CC   phosphatase 6. It specifically hybridises with at least an 8-nucleobase
CC   portion of a preferred target region on the nucleic acid molecule
CC   encoding dual specific phosphatase 6. The antisense oligonucleotide is
CC   useful for inhibiting the expression of dual specific phosphatase 6 in
CC   cells or tissues to treat diseases associated with their expression, such
CC   as a hyperproliferative disorder, a condition arising from aberrant
CC   apoptosis, an inflammatory disorder or a developmental disorder. In
CC   addition, the compound is used for diagnostics, prophylaxis, or as
CC   research reagents or kits. This sequence represents a human dual specific
CC   phosphatase 6 antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        445 AAGATCTCCACTGAGGA 461
              ||||||||||||| | |
Db          1 AAGATCTCCACTGGGAA 17


RESULT 1604
ADI26884/c
ID   ADI26884 standard; DNA; 20 BP.
XX
AC   ADI26884;
XX
DT   22-APR-2004  (first entry)
XX
DE   Cyclin dependent kinase 4 antisense oligonucleotide #50.
XX
KW   cytostatic; antidiabetic; antiinfertility; gene therapy;
KW   cyclin-dependent kinase 4; diabetes; infertility;
KW   hyperproliferative disorder; cancer; antisense technology; human; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004005567-A1.
XX
PD   08-JAN-2004.
XX
PF   02-JUL-2002; 2002US-00188779.
XX
PR   02-JUL-2002; 2002US-00188779.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Freier SM,  Dobie KW;
XX
DR   WPI; 2004-081710/08.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding cyclin-dependent kinase 4, useful for preparing a
PT   composition for treating diabetes, infertility or hyperproliferative
PT   disorder, e.g., cancer.
XX
PS   Example 15; SEQ ID NO 69; 90pp; English.
XX
CC   The invention describes a new antisense oligonucleotide, having a
CC   sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclin-
CC   dependent kinase 4, specifically hybridises with the nucleic acid
CC   encoding cyclin-dependent kinase 4 and inhibits expression of cyclin-
CC   dependent kinase 4. The antisense oligonucleotide is useful for preparing
CC   a composition for treating diabetes, infertility or hyperproliferative
CC   disorder, e.g., cancer. This sequence represents a human cyclin dependent
CC   kinase 4 antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        689 ACCTTGTGGCACTCAAG 705
              || ||||||| ||||||
Db         19 ACTTTGTGGCCCTCAAG 3


RESULT 1605
ADI79383
ID   ADI79383 standard; DNA; 20 BP.
```

```
XX
AC   ADI79383;
XX
DT   22-APR-2004  (first entry)
XX
DE   Mouse Sema3C reverse transcriptase PCR primer SEQ ID NO:21.
XX
KW   invasive disease; disease pathogenesis; malignant; cancer; metastasis;
KW   tumour progression; cytostatic; immunosuppressive; neuroprotective;
KW   cardiant; antimicrobial; nephrotropic; respiratory; vaccine;
KW   gene therapy; autoimmune disease; infectious disease;
KW   growth disturbance disease; neurological disease; cardiovascular disease;
KW   respiratory disease; kidney disease; neoplastic disease; mouse; Sema3C;
KW   semaphorin; reverse transcriptase; PCR; primer; ss.
XX
OS   Mus sp.
OS   Synthetic.
XX
PN   WO2004006898-A2.
XX
PD   22-JAN-2004.
XX
PF   10-JUL-2003; 2003WO-DK000486.
XX
PR   11-JUL-2002; 2002DK-00001092.
XX
PA   (SEMA-) SEMA APS.
XX
PI   Christensen C,  Lukanidin E,  Olsen O,  Albrechtsen M;
XX
DR   WPI; 2004-122767/12.
XX
PT   Use of an agent for preparing a medicament for preventing progression of
PT   an invasive disease, for treating malignant forms of cancer or for
PT   preventing metastasis of cancer in vivo and tumor progression in vitro
PT   and/or in vivo.
XX
PS   Example 1; SEQ ID NO 21; 134pp; English.
XX
CC   The present invention describes an agent which can be used for preparing
CC   a medicament for preventing the progression of an invasive disease in an
CC   individual, where invasion of cells, other organisms or invasion of
CC   itself plays a role in disease pathogenesis, for treating malignant forms
CC   of cancer or for preventing metastasis of cancer in vivo and tumour
CC   progression in vitro and/or in vivo. The agent comprises: (a) an agent
CC   capable of inhibiting expression of a polypeptide belonging to the
CC   semaphorin family of proteins; (b) an agent capable of inhibiting
CC   intracellular or extracellular proteolytic processing of a polypeptide
CC   belonging to the semaphorin family of proteins, where the agent is
CC   selected from antibodies or fragments of antibodies directed to the
CC   polypeptide, or fragments or variants of fragments of the polypeptide;
CC   and/or (c) an agent capable of inhibiting binding of a proteolytic
CC   fragment of a polypeptide belonging to the semaphorin family of proteins
CC   to a receptor and thereby inhibiting sequential activation of the
CC   receptor. Also described: (1) an antisense compound capable of inhibiting
CC   expression of the semaphorin; (2) a peptide compound, capable of binding
CC   a proprotein convertase and thereby inhibiting the activity of the
CC   convertase; (3) an isolated polyclonal or monoclonal antibody compound;
CC   (4) a hybridoma cell line capable of producing a monoclonal antibody; and
CC   (5) a method for diagnosing or prognosing malignant cancer. The agent has
CC   cytostatic, immunosuppressive, neuroprotective, cardiant, antimicrobial,
CC   nephrotropic and respiratory activities, and can be used in vaccines and
CC   in gene therapy. The agent is useful for preparing a medicament for
CC   preventing progression of an invasive disease, e.g., autoimmune,
CC   infectious, growth disturbance, neurological, cardiovascular,
CC   respiratory, kidney or neoplastic diseases, where invasion of cells,
CC   other organisms or invasion of itself plays a role in disease
CC   pathogenesis, for treating malignant forms of cancer or for preventing
CC   metastasis of cancer in vivo and tumour progression in vitro and/or in
CC   vivo. The present sequence represents a reverse transcriptase PCR primer
CC   for mouse Sema3C, which is used in the exemplification of the present
CC   invention.
XX
SQ   Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        872 ACCTGGATGACTGTGGG 888
              ||||| ||| |||||||
Db          4 ACCTGTATGTCTGTGGG 20


RESULT 1606
ADI19207/c
ID   ADI19207 standard; DNA; 20 BP.
XX
AC   ADI19207;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human PCTAIRE protein kinase 2 antisense oligonucleotide #61.
XX
KW   gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW   neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2003225256-A1.
XX
PD   04-DEC-2003.
XX
PF   31-MAY-2002; 2002US-00160787.
XX
PR   31-MAY-2002; 2002US-00160787.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Watt AT;
XX
DR   WPI; 2004-022085/02.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT   composition for treating neurological disorders.
XX
PS   Example 15; SEQ ID NO 74; 58pp; English.
XX
CC   The invention describes a new antisense oligonucleotide, having a
CC   sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC   protein kinase 2, that specifically hybridises with the nucleic acid
CC   encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC   The antisense oligonucleotide is useful for preparing a composition for
CC   treating e.g., neurological disorders. This sequence represents a human
CC   PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 3 A; 6 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
```

```
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1436 AGGATGCCATGAAACAT 1452
              | || ||||||||||||
Db         20 AAGAGGCCATGAAACAT 4


RESULT 1607
ADI19269
ID   ADI19269 standard; DNA; 20 BP.
XX
AC   ADI19269;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human PCTAIRE protein kinase 2 antisense oligonucleotide #123.
XX
KW   gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW   neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2003225256-A1.
XX
PD   04-DEC-2003.
XX
PF   31-MAY-2002; 2002US-00160787.
XX
PR   31-MAY-2002; 2002US-00160787.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Watt AT;
XX
DR   WPI; 2004-022085/02.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT   composition for treating neurological disorders.
XX
PS   Example 15; SEQ ID NO 136; 58pp; English.
XX
CC   The invention describes a new antisense oligonucleotide, having a
CC   sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC   protein kinase 2, that specifically hybridises with the nucleic acid
CC   encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC   The antisense oligonucleotide is useful for preparing a composition for
CC   treating e.g., neurological disorders. This sequence represents a human
CC   PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1525 ATTCAGCTACAAAAGGA 1541
              |||||| | ||||||||
Db          1 ATTCAGTTGCAAAAGGA 17


RESULT 1608
ADI19213/c
ID   ADI19213 standard; DNA; 20 BP.
XX
AC   ADI19213;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human PCTAIRE protein kinase 2 antisense oligonucleotide #67.
XX
KW   gene therapy; antisense technology; PCTAIRE protein kinase 2;
KW   neurological disorder; human; PCTAIRE protein kinase 2; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2003225256-A1.
XX
PD   04-DEC-2003.
XX
PF   31-MAY-2002; 2002US-00160787.
XX
PR   31-MAY-2002; 2002US-00160787.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Watt AT;
XX
DR   WPI; 2004-022085/02.
XX
PT   New antisense oligonucleotide, having a sequence targeted to a nucleic
PT   acid encoding PCTAIRE protein kinase 2, useful for preparing a
PT   composition for treating neurological disorders.
XX
PS   Claim 1; SEQ ID NO 80; 58pp; English.
XX
CC   The invention describes a new antisense oligonucleotide, having a
CC   sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE
CC   protein kinase 2, that specifically hybridises with the nucleic acid
CC   encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp.
CC   The antisense oligonucleotide is useful for preparing a composition for
CC   treating e.g., neurological disorders. This sequence represents a human
CC   PCTAIRE protein kinase 2 antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1525 ATTCAGCTACAAAAGGA 1541
              |||||| | ||||||||
Db         20 ATTCAGTTGCAAAAGGA 4


RESULT 1609
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```
ADJ31669/c
ID   ADJ31669 standard; DNA; 20 BP.
XX
AC   ADJ31669;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human haem oxygenase 1 antisense oligonucleotide, ISIS #203104.
XX
KW   Haem oxygenase 1; HO; hyperbilirubinaemia; neonatal jaundice;
KW   neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW   antisense-therapy; nootropic; neuroprotective; human;
KW   phosphorothioate backbone; antisense; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone where all cytidines are
FT                   5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2003235913-A1.
XX
PD   25-DEC-2003.
XX
PF   20-JUN-2002; 2002US-00178258.
XX
PR   20-JUN-2002; 2002US-00178258.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dobie KW;
XX
DR   WPI; 2004-070587/07.
XX
PT   New antisense oligonucleotide compounds, useful for diagnosing,
PT   preventing and/or treating conditions with aberrant activity of heme
PT   oxygenase 1, such as hyperbilirubinemia, neonatal jaundice and
PT   neurodegenerative diseases.
XX
PS   Example 15; SEQ ID NO 15; 43pp; English.
XX
CC   The present invention relates to antisense compounds, compositions and
CC   methods used for modulating the expression of haem oxygenase (HO) 1. The
CC   methods and compositions of the present invention are useful for the
CC   diagnosis, prevention and/or treatment of diseases or conditions
CC   associated with aberrant expression or activity of haem oxygenase 1 such
CC   as hyperbilirubinaemia, neonatal jaundice and neurodegenerative diseases
CC   like Alzheimer's and Parkinson's disease. The invention is also useful in
CC   antisense-therapy. The present sequence is human haem oxygenase 1
CC   antisense oligonucleotide used in the exemplification of the invention.
XX
SQ   Sequence 20 BP; 3 A; 7 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        861 CCTGAAGCAGTACCTGG 877
              |||| |||||| ||||||
Db         20 CCTGGAGCAGGACCTGG 4
```

```
RESULT 1610
ADJ36703
ID   ADJ36703 standard; DNA; 20 BP.
XX
AC   ADJ36703;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human gene 216 SNP detection primer seq id 94.
XX
KW   antiasthmatic; respiratory; gene therapy; asthma;
KW   bronchial hyperresponsiveness; atopy; chronic obstructive lung disease;
KW   adult respiratory distress syndrome; obesity; inflammatory bowel disease;
KW   human; gene 216; single nucleotide polymorphism; SNP; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2004002470-A1.
XX
PD   01-JAN-2004.
XX
PF   17-OCT-2002; 2002US-00277216.
XX
PR   13-APR-2000; 2000US-00548797.
PR   13-APR-2001; 2001US-00834597.
PR   19-APR-2002; 2002US-00126022.
XX
PA   (KEIT/) KEITH T.
PA   (LITT/) LITTLE R D.
PA   (VEER/) VAN EERDEWEGH P.
PA   (DUPU/) DUPUIS J.
PA   (DMAS/) DEL MASTRO R G.
PA   (SIMO/) SIMON J.
PA   (ALLE/) ALLEN K.
PA   (PAND/) PANDIT S.
XX
PI   Keith T,  Little RD,  Eerdewegh PV,  Dupuis J,  Del Mastro RG;
PI   Simon J,  Allen K,  Pandit S;
XX
DR   WPI; 2004-061675/06.
XX
PT   Gene 216 nucleic acid, useful for preparing a composition for treating
PT   disorders e.g., asthma, bronchial hyperresponsiveness, atopy, chronic
PT   obstructive lung disease and adult respiratory distress syndrome.
XX
PS   Example 10; SEQ ID NO 94; 441pp; English.
XX
CC   The invention describes a new isolated nucleic acid comprising a fully
CC   defined sequence having 23574 bp or at least its 50 or 15 contiguous
CC   nucleotides and includes: allele G of single nucleotide polymorphism
CC   (SNP) AB+2; allele G of SNP BC+1; and allele C of SNP BC+2. The invention
CC   describes identifying increased susceptibility to a disorder comprising
CC   asthma, bronchial hyperresponsiveness, atopy, chronic obstructive lung
CC   disease and adult respiratory distress syndrome in a subject comprising
CC   testing a biological sample obtained from a subject for the presence of
CC   at least one allele or haplotype given in the specification, where the
CC   presence identifies an increased susceptibility to the disorder. The
CC   nucleic acid is useful for preparing a composition for treating disorders
CC   comprising asthma, bronchial hyperresponsiveness, atopy, chronic
CC   obstructive lung disease and adult respiratory distress syndrome. This
CC   sequence represents a primer used to detect single nucleotide
CC   polymorphisms in the human gene 216.
XX
SQ   Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        538 CCCATCTTTGACAAGCC 554
              ||| ||| |||||||||
Db          2 CCCTTCTGTGACAAGCC 18
```

```
RESULT 1611
ADJ36763/c
ID   ADJ36763 standard; DNA; 20 BP.
XX
AC   ADJ36763;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human gene 216 SNP detection primer seq id 154.
XX
KW   antiasthmatic; respiratory; gene therapy; asthma;
KW   bronchial hyperresponsiveness; atopy; chronic obstructive lung disease;
KW   adult respiratory distress syndrome; obesity; inflammatory bowel disease;
KW   human; gene 216; single nucleotide polymorphism; SNP; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2004002470-A1.
XX
PD   01-JAN-2004.
XX
PF   17-OCT-2002; 2002US-00277216.
XX
PR   13-APR-2000; 2000US-00548797.
PR   13-APR-2001; 2001US-00834597.
PR   19-APR-2002; 2002US-00126022.
XX
PA   (KEIT/) KEITH T.
PA   (LITT/) LITTLE R D.
PA   (VEER/) VAN EERDEWEGH P.
PA   (DUPU/) DUPUIS J.
PA   (DMAS/) DEL MASTRO R G.
PA   (SIMO/) SIMON J.
PA   (ALLE/) ALLEN K.
PA   (PAND/) PANDIT S.
XX
PI   Keith T,  Little RD,  Eerdewegh PV,  Dupuis J,  Del Mastro RG;
PI   Simon J,  Allen K,  Pandit S;
XX
DR   WPI; 2004-061675/06.
XX
PT   Gene 216 nucleic acid, useful for preparing a composition for treating
PT   disorders e.g., asthma, bronchial hyperresponsiveness, atopy, chronic
PT   obstructive lung disease and adult respiratory distress syndrome.
XX
PS   Example 10; SEQ ID NO 154; 441pp; English.
XX
CC   The invention describes a new isolated nucleic acid comprising a fully
CC   defined sequence having 23574 bp or at least its 50 or 15 contiguous
CC   nucleotides and includes: allele G of single nucleotide polymorphism
CC   (SNP) AB+2; allele G of SNP BC+1; and allele C of SNP BC+2. The invention
CC   describes identifying increased susceptibility to a disorder comprising
CC   asthma, bronchial hyperresponsiveness, atopy, chronic obstructive lung
CC   disease and adult respiratory distress syndrome in a subject comprising
CC   testing a biological sample obtained from a subject for the presence of
CC   at least one allele or haplotype given in the specification, where the
CC   presence identifies an increased susceptibility to the disorder. The
CC   nucleic acid is useful for preparing a composition for treating disorders
CC   comprising asthma, bronchial hyperresponsiveness, atopy, chronic
CC   obstructive lung disease and adult respiratory distress syndrome. This
CC   sequence represents a primer used to detect single nucleotide
CC   polymorphisms in the human gene 216.
XX
SQ   Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        538 CCCATCTTTGACAAGCC 554
              ||| ||| |||||||||
Db         19 CCCTTCTGTGACAAGCC 3


RESULT 1612
ADK96976/c
ID   ADK96976 standard; DNA; 20 BP.
XX
AC   ADK96976;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Primer of the invention #2696.
XX
KW   human; single nucleotide polymorphism; SNP; ss; primer.
XX
OS   Synthetic.
XX
PN   JP2003259875-A.
XX
PD   16-SEP-2003.
XX
PF   08-MAR-2002; 2002JP-00064373.
XX
PR   08-MAR-2002; 2002JP-00064373.
XX
PA   (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR   WPI; 2004-093977/10.
XX
PT   Novel polynucleotide useful for PCR amplification along with two DNA
PT   fragment from another set of sequences, or for detecting single
PT   nucleotide polymorphism in human gene.
XX
PS   Claim 2; SEQ ID NO 6005; 2627pp; Japanese.
XX
CC   The present invention relates to a polynucleotide isolated from a human
CC   gene and is useful for detecting a single nucleotide polymorphism in a
CC   human gene or for diagnosing of disease. The invention enables the
CC   detection of a single nucleotide polymorphism in a human gene. The
CC   present sequence represents a primer of the invention.
XX
SQ   Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        165 ACTCCGAGGTGGCCGAG 181
              | |||||||||||| ||
Db         19 AGTCCGAGGTGGCCAAG 3


RESULT 1613
ADK94803
ID   ADK94803 standard; DNA; 20 BP.
XX
AC   ADK94803;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Primer of the invention #523.
XX
KW   human; single nucleotide polymorphism; SNP; ss; primer.
XX
OS   Synthetic.
XX
PN   JP2003259875-A.
XX
PD   16-SEP-2003.
XX
PF   08-MAR-2002; 2002JP-00064373.
XX
PR   08-MAR-2002; 2002JP-00064373.
```

```
XX
PA   (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
DR   WPI; 2004-093977/10.
XX
PT   Novel polynucleotide useful for PCR amplification along with two DNA
PT   fragment from another set of sequences, or for detecting single
PT   nucleotide polymorphism in human gene.
XX
PS   Claim 2; SEQ ID NO 3832; 2627pp; Japanese.
XX
CC   The present invention relates to a polynucleotide isolated from a human
CC   gene and is useful for detecting a single nucleotide polymorphism in a
CC   human gene or for diagnosing of disease. The invention enables the
CC   detection of a single nucleotide polymorphism in a human gene. The
CC   present sequence represents a primer of the invention.
XX
SQ   Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1729 CACCTGCCCACTTGTCC 1745
              ||| || ||||||||||
Db          1 CACGTGACCACTTGTCC 17


RESULT 1614
ADJ61393
ID   ADJ61393 standard; DNA; 20 BP.
XX
AC   ADJ61393;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Oligonucleotide associated to IL5R-X61176 #85.
XX
KW   interleukin; IL-4 receptor; IL-5 receptor; lung disease;
KW   airway inflammation; allergy; asthma; impeded respiration;
KW   cystic fibrosis; acute respiratory distress syndrome;
KW   pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO2004011613-A2.
XX
PD   05-FEB-2004.
XX
PF   25-JUL-2003; 2003WO-US023509.
XX
PR   29-JUL-2002; 2002US-0399076P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Tang L,  Sandrasagra A,  Aguilar D,  Miller S;
PI   Shahabuddin S,  Lu H,  Cong H;
XX
DR   WPI; 2004-203534/19.
XX
PT   Novel single or multiple target oligonucleotide anti-sense to e.g.
PT   initiation codons and introns of respiratory disease-relevant genes e.g.,
PT   CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
PT   disease e.g., asthma.
XX
PS   Claim 2; SEQ ID NO 2249; 85pp; English.
XX
CC   The present invention relates to an oligonucleotide anti-sense to e.g.,
CC   initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC   end of nucleic acid target comprising gene(s) chosen from e.g.
CC   interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC   oligonucleotide and optionally surfactant operatively linked to the
CC   oligonucleotide. The method is useful for preventing or treating a
CC   respiratory or lung disease, which involves administering to the airways
CC   of a subject an effective amount of an inhibitor. The oligonucleotide is
CC   useful for production of a medicament for the prevention and/or treatment
CC   of a respiratory or lung disease. The respiratory or lung disease is
CC   chosen from airway inflammation, allergy(ies), asthma, impeded
CC   respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC   (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC   (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC   obstruction. The present sequence represents an oligonucleotide of the
CC   invention.
XX
SQ   Sequence 20 BP; 6 A; 4 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1444 ATGAAACATCCATTCTT 1460
              ||||| ||||||| |||
Db          2 ATGAAGCATCCATACTT 18


RESULT 1615
ADJ59452
ID   ADJ59452 standard; DNA; 20 BP.
XX
AC   ADJ59452;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Oligonucleotide associated to IL 5R #149.
XX
KW   interleukin; IL-4 receptor; IL-5 receptor; lung disease;
KW   airway inflammation; allergy; asthma; impeded respiration;
KW   cystic fibrosis; acute respiratory distress syndrome;
KW   pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO2004011613-A2.
XX
PD   05-FEB-2004.
XX
PF   25-JUL-2003; 2003WO-US023509.
XX
PR   29-JUL-2002; 2002US-0399076P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Tang L,  Sandrasagra A,  Aguilar D,  Miller S;
PI   Shahabuddin S,  Lu H,  Cong H;
XX
DR   WPI; 2004-203534/19.
XX
PT   Novel single or multiple target oligonucleotide anti-sense to e.g.
PT   initiation codons and introns of respiratory disease-relevant genes e.g.,
PT   CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
PT   disease e.g., asthma.
XX
PS   Claim 2; SEQ ID NO 308; 85pp; English.
XX
CC   The present invention relates to an oligonucleotide anti-sense to e.g.,
CC   initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-
CC   end of nucleic acid target comprising gene(s) chosen from e.g.
CC   interleukin (IL)-4 receptor, IL-5 receptor or salts of the
CC   oligonucleotide and optionally surfactant operatively linked to the
CC   oligonucleotide. The method is useful for preventing or treating a
CC   respiratory or lung disease, which involves administering to the airways
CC   of a subject an effective amount of an inhibitor. The oligonucleotide is
CC   useful for production of a medicament for the prevention and/or treatment
CC   of a respiratory or lung disease. The respiratory or lung disease is
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```
CC   chosen from airway inflammation, allergy(ies), asthma, impeded
CC   respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases
CC   (COPD), allergic rhinitis (AR), acute respiratory distress syndrome
CC   (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway
CC   obstruction. The present sequence represents an oligonucleotide of the
CC   invention.
XX
SQ   Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1444 ATGAAACATCCATTCTT 1460
              ||||| ||||||| |||
Db          3 ATGAAGCATCCATACTT 19


RESULT 1616
ADJ93778
ID   ADJ93778 standard; DNA; 20 BP.
XX
AC   ADJ93778;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Forward primer Ex3 AG dir.
XX
KW   Insecticide; acetylcholine esterase; ace-1; organophosphorus; carbamate;
KW   insecticide; resistance; AChE1; mosquito; PCR; primer; ss.
XX
OS   Synthetic.
XX
PN   WO2004000994-A2.
XX
PD   31-DEC-2003.
XX
PF   19-JUN-2003; 2003WO-FR001876.
XX
PR   20-JUN-2002; 2002FR-00007622.
PR   05-NOV-2002; 2002FR-00013799.
XX
PA   (CNRS ) CENT NAT RECH SCI.
PA   (UYMO-) UNIV MONTPELLIER 2.
XX
PI   Weill M,  Fort P,  Raymond M,  Pasteur N;
XX
DR   WPI; 2004-082482/08.
XX
PT   New insect acetylcholine esterase, useful in screening for insecticides
PT   effective against strains resistant to organophosphates and carbamates.
XX
PS   Claim 11; SEQ ID NO 123; 169pp; French.
XX
CC   The invention relates to an insect acetylcholine esterase (ace-1) (I)
CC   with a central catalytic region, given in the specification as ADJ93656,
CC   or (ii) a sequence 60 % identical or 70 % similar to ADJ93656. Also
CC   disclosed is a method for detecting insects that carry resistance to
CC   organophosphorus and carbamate insecticides. The method of the invention
CC   is useful for the inhibition of acetylcholine esterases that are
CC   resistant to organophosphorus and carbamate insecticides. Ace-1 and
CC   transgenic invertebrates that express it, are used to screen for
CC   insecticides, i.e. inhibitors of ace-1. The nucleic acid that encodes
CC   (I), also antibodies specific for (I), are used to detect insects,
CC   particularly mosquito disease vectors but also agricultural pests, that
CC   are resistant to organophosphorus and carbamate insecticides. Agents that
CC   inhibit (I) are effective against insect strains resistant to
CC   organophosphorus and carbamate insecticides. Sequences given in ADJ93657-
CC   ADJ93784 represent products of the ace-1 gene (cDNA, protein, AChE1) from
CC   various insects, and also primers for the amplification of ace-1 nucleic
CC   acids.
XX
SQ   Sequence 20 BP; 3 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1595 TGGTGGACACCGAGTTC 1611
              | |||||||||| ||||
Db          3 TCGTGGACACCGTGTTC 19


RESULT 1617
ADJ64147/c
ID   ADJ64147 standard; DNA; 20 BP.
XX
AC   ADJ64147;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human phospholipase D2 target oligonucleotide  #4.
XX
KW   Phospholipase D2; hyperproliferative disorder; cancer;
KW   neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW   infection; inflammation; tumour; therapy; human; ss.
XX
OS   Homo sapiens.
XX
PN   US2004005705-A1.
XX
PD   08-JAN-2004.
XX
PF   20-JUN-2002; 2002US-00177896.
XX
PR   20-JUN-2002; 2002US-00177896.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Dobie KW;
XX
DR   WPI; 2004-081729/08.
XX
PT   New antisense compounds targeted to nucleic acid molecules encoding
PT   phospholipase D2, useful for treating diseases associated with expression
PT   of phospholipase D2, e.g. cancer, Alzheimer's disease or Parkinson's
PT   disease.
XX
PS   Example 15; SEQ ID NO 51; 46pp; English.
XX
CC   The present invention relates to antisense oligonucleotides which are
CC   targetted to nucleic acid molecule encoding phospholipase D2 and the
CC   encoding protein. The invention is useful for inhibiting the expression
CC   of phospholipase D2 and for treating diseases and conditions associated
CC   with expression of phospholipase D2 e.g. hyperproliferative disorder such
CC   as cancer, neurodegenerative disease such as Alzheimer's disease and
CC   Parkinson's disease. The invention is also useful for therapeutic and
CC   prophylactic applications to prevent or delay infection, inflammation and
CC   tumour formation. The present sequence is human phospholipase D2 target
CC   oligonucleotide.
XX
SQ   Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        210 GCAGATAGGCCTGGATG 226
              |||||  ||||||||||
Db         20 GCAGAATGGCCTGGATG 4


RESULT 1618
ADJ64112
ID   ADJ64112 standard; DNA; 20 BP.
XX
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```
AC   ADJ64112;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human phospholipase D2 antisense oligonucleotide ISIS #159040.
XX
KW   Phospholipase D2; hyperproliferative disorder; cancer;
KW   neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW   infection; inflammation; tumour; therapy; human; antisense; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone where all cytidines are
FT                   5'-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'- methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'- methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004005705-A1.
XX
PD   08-JAN-2004.
XX
PF   20-JUN-2002; 2002US-00177896.
XX
PR   20-JUN-2002; 2002US-00177896.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Dobie KW;
XX
DR   WPI; 2004-081729/08.
XX
PT   New antisense compounds targeted to nucleic acid molecules encoding
PT   phospholipase D2, useful for treating diseases associated with expression
PT   of phospholipase D2, e.g. cancer, Alzheimer's disease or Parkinson's
PT   disease.
XX
PS   Example 15; SEQ ID NO 16; 46pp; English.
XX
CC   The present invention relates to antisense oligonucleotides which are
CC   targetted to nucleic acid molecule encoding phospholipase D2 and the
CC   encoding protein. The invention is useful for inhibiting the expression
CC   of phospholipase D2 and for treating diseases and conditions associated
CC   with expression of phospholipase D2 e.g. hyperproliferative disorder such
CC   as cancer, neurodegenerative disease such as Alzheimer's disease and
CC   Parkinson's disease. The invention is also useful for therapeutic and
CC   prophylactic applications to prevent or delay infection, inflammation and
CC   tumour formation. The present sequence is human phospholipase D2
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 3 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        210 GCAGATAGGCCTGGATG 226
              |||||  ||||||||||
Db          1 GCAGAATGGCCTGGATG 17


RESULT 1619
ADJ15785/c
ID   ADJ15785 standard; DNA; 20 BP.
XX
AC   ADJ15785;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Antisense DNA oligo used to modulate human LRH1 expression SeqID 335.
XX
KW   human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW   phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW   low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW   gall stone; triglyceridaemia; obesity; hepatitis;
KW   hepatocellular carcinoma; aromatase; cytostatic; antilipaemic;
KW   antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW   antiinflammatory; virucidal.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /label= OTHER= phosphorothioate backbone
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
XX
PN   WO2004003201-A2.
XX
PD   08-JAN-2004.
XX
PF   01-JUL-2003; 2003WO-US020865.
XX
PR   01-JUL-2002; 2002US-0392813P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Kane CD;
XX
DR   WPI; 2004-083058/08.
XX
PT   New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT   related homologue-1 (LRH1), useful for treating breast cancer,
PT   dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
PS   Example 15; SEQ ID NO 335; 909pp; English.
XX
CC   This invention relates to novel antisense compounds useful for modulating
CC   the expression of liver related homologue-1 (LRH1) and splice variants
CC   thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC   length that target a portion of an active site on the nucleic acid
CC   molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC   nuclear receptor protein that functions as a tissue specific
CC   transcription factor. The present invention describes antisense
CC   oligonucleotides that comprise at least one modified internucleoside
CC   linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC   a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC   methylcytidine. These antisense compounds are useful for treating or
CC   diagnosing a disease associated with LRH1, such as breast cancer,
CC   dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC   LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC   triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC   hepatitis, as well as hepatocellular carcinoma or a condition associated
CC   with aromatase activity. Accordingly, these compositions exhibit
CC   cytostatic, antilipaemic, antiarteriosclerotic, anorectic, hepatotropic,
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```
CC   litholytic, antiinflammatory and virucidal activities. This
CC   oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC   expression of the human LRH1 protein of the invention.
XX
SQ   Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        853 GACAAGGACCTGAAGCA 869
              |||| || |||||||||
Db         17 GACAGGGCCCTGAAGCA 1


RESULT 1620
ADJ18518/c
ID   ADJ18518 standard; DNA; 20 BP.
XX
AC   ADJ18518;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Antisense DNA oligo used to modulate human LRH1 expression SeqID 3068.
XX
KW   human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW   phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW   low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW   gall stone; triglyceridaemia; obesity; hepatitis;
KW   hepatocellular carcinoma; aromatase; cytostatic; antilipaemic;
KW   antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW   antiinflammatory; virucidal.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /label= OTHER= phosphorothioate backbone
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
XX
PN   WO2004003201-A2.
XX
PD   08-JAN-2004.
XX
PF   01-JUL-2003; 2003WO-US020865.
XX
PR   01-JUL-2002; 2002US-0392813P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Kane CD;
XX
DR   WPI; 2004-083058/08.
XX
PT   New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT   related homologue-1 (LRH1), useful for treating breast cancer,
PT   dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
PS   Example 15; SEQ ID NO 3068; 909pp; English.
XX
CC   This invention relates to novel antisense compounds useful for modulating
CC   the expression of liver related homologue-1 (LRH1) and splice variants
CC   thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC   length that target a portion of an active site on the nucleic acid
CC   molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC   nuclear receptor protein that functions as a tissue specific
CC   transcription factor. The present invention describes antisense
CC   oligonucleotides that comprise at least one modified internucleoside
CC   linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC   a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC   methylcytidine. These antisense compounds are useful for treating or
CC   diagnosing a disease associated with LRH1, such as breast cancer,
CC   dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC   LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC   triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC   hepatitis, as well as hepatocellular carcinoma or a condition associated
CC   with aromatase activity. Accordingly, these compositions exhibit
CC   cytostatic, antilipaemic, antiarteriosclerotic, anorectic, hepatotropic,
CC   litholytic, antiinflammatory and virucidal activities. This
CC   oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC   expression of the human LRH1 protein of the invention.
XX
SQ   Sequence 20 BP; 5 A; 1 C; 8 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1447 AAACATCCATTCTTCCT 1463
              ||||||||| ||| |||
Db         17 AAACATCCACTCTGCCT 1


RESULT 1621
ADJ18799
ID   ADJ18799 standard; DNA; 20 BP.
XX
AC   ADJ18799;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Antisense DNA oligo used to modulate human LRH1 expression SeqID 3349.
XX
KW   human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW   phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW   low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW   gall stone; triglyceridaemia; obesity; hepatitis;
KW   hepatocellular carcinoma; aromatase; cytostatic; antilipaemic;
KW   antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW   antiinflammatory; virucidal.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /label= OTHER= phosphorothioate backbone
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
XX
PN   WO2004003201-A2.
XX
PD   08-JAN-2004.
XX
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PF   01-JUL-2003; 2003WO-US020865.
XX
PR   01-JUL-2002; 2002US-0392813P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Kane CD;
XX
DR   WPI; 2004-083058/08.
XX
PT   New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT   related homologue-1 (LRH1), useful for treating breast cancer,
PT   dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
PS   Example 15; SEQ ID NO 3349; 909pp; English.
XX
CC   This invention relates to novel antisense compounds useful for modulating
CC   the expression of liver related homologue-1 (LRH1) and splice variants
CC   thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC   length that target a portion of an active site on the nucleic acid
CC   molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC   nuclear receptor protein that functions as a tissue specific
CC   transcription factor. The present invention describes antisense
CC   oligonucleotides that comprise at least one modified internucleoside
CC   linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC   a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC   methylcytidine. These antisense compounds are useful for treating or
CC   diagnosing a disease associated with LRH1, such as breast cancer,
CC   dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC   LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC   triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC   hepatitis, as well as hepatocellular carcinoma or a condition associated
CC   with aromatase activity. Accordingly, these compositions exhibit
CC   cytostatic, antilipaemic, antiarteriosclerotic, anorectic, hepatotropic,
CC   litholytic, antiinflammatory and virucidal activities. This
CC   oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC   expression of the human LRH1 protein of the invention.
XX
SQ   Sequence 20 BP; 8 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1607 AGTTCTAAGCCACAGAC 1623
              || |||||| |||||||
Db          1 AGGTCTAAGACACAGAC 17


RESULT 1622
ADJ15666/c
ID   ADJ15666 standard; DNA; 20 BP.
XX
AC   ADJ15666;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Antisense DNA oligo used to modulate human LRH1 expression SeqID 216.
XX
KW   human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW   phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW   low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW   gall stone; triglyceridaemia; obesity; hepatitis;
KW   hepatocellular carcinoma; aromatase; cytostatic; antilipaemic;
KW   antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW   antiinflammatory; virucidal.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /label= OTHER= phosphorothioate backbone
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
XX
PN   WO2004003201-A2.
XX
PD   08-JAN-2004.
XX
PF   01-JUL-2003; 2003WO-US020865.
XX
PR   01-JUL-2002; 2002US-0392813P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Kane CD;
XX
DR   WPI; 2004-083058/08.
XX
PT   New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT   related homologue-1 (LRH1), useful for treating breast cancer,
PT   dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
PS   Example 15; SEQ ID NO 216; 909pp; English.
XX
CC   This invention relates to novel antisense compounds useful for modulating
CC   the expression of liver related homologue-1 (LRH1) and splice variants
CC   thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC   length that target a portion of an active site on the nucleic acid
CC   molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC   nuclear receptor protein that functions as a tissue specific
CC   transcription factor. The present invention describes antisense
CC   oligonucleotides that comprise at least one modified internucleoside
CC   linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC   a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC   methylcytidine. These antisense compounds are useful for treating or
CC   diagnosing a disease associated with LRH1, such as breast cancer,
CC   dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC   LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC   triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC   hepatitis, as well as hepatocellular carcinoma or a condition associated
CC   with aromatase activity. Accordingly, these compositions exhibit
CC   cytostatic, antilipaemic, antiarteriosclerotic, anorectic, hepatotropic,
CC   litholytic, antiinflammatory and virucidal activities. This
CC   oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC   expression of the human LRH1 protein of the invention.
XX
SQ   Sequence 20 BP; 1 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        853 GACAAGGACCTGAAGCA 869
              |||| || |||||||||
Db         20 GACAGGGCCCTGAAGCA 4


RESULT 1623
ADJ18672
ID   ADJ18672 standard; DNA; 20 BP.
XX
AC   ADJ18672;
XX
DT   20-MAY-2004  (first entry)
```

```
XX
DE   Antisense DNA oligo used to modulate human LRH1 expression SeqID 3222.
XX
KW   human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW   phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW   low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW   gall stone; triglyceridaemia; obesity; hepatitis;
KW   hepatocellular carcinoma; aromatase; cytostatic; antilipaemic;
KW   antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW   antiinflammatory; virucidal.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /label= OTHER= phosphorothioate backbone
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
XX
PN   WO2004003201-A2.
XX
PD   08-JAN-2004.
XX
PF   01-JUL-2003; 2003WO-US020865.
XX
PR   01-JUL-2002; 2002US-0392813P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Kane CD;
XX
DR   WPI; 2004-083058/08.
XX
PT   New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT   related homologue-1 (LRH1), useful for treating breast cancer,
PT   dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
PS   Example 15; SEQ ID NO 3222; 909pp; English.
XX
CC   This invention relates to novel antisense compounds useful for modulating
CC   the expression of liver related homologue-1 (LRH1) and splice variants
CC   thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC   length that target a portion of an active site on the nucleic acid
CC   molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC   nuclear receptor protein that functions as a tissue specific
CC   transcription factor. The present invention describes antisense
CC   oligonucleotides that comprise at least one modified internucleoside
CC   linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC   a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC   methylcytidine. These antisense compounds are useful for treating or
CC   diagnosing a disease associated with LRH1, such as breast cancer,
CC   dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC   LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC   triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC   hepatitis, as well as hepatocellular carcinoma or a condition associated
CC   with aromatase activity. Accordingly, these compositions exhibit
CC   cytostatic, antilipaemic, antiarteriosclerotic, anorectic, hepatotropic,
CC   litholytic, antiinflammatory and virucidal activities. This
CC   oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC   expression of the human LRH1 protein of the invention.
XX
SQ   Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1607 AGTTCTAAGCCACAGAC 1623
              || |||||| |||||||
Db          4 AGGTCTAAGACACAGAC 20


RESULT 1624
ADJ18843
ID   ADJ18843 standard; DNA; 20 BP.
XX
AC   ADJ18843;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Antisense DNA oligo used to modulate human LRH1 expression SeqID 3393.
XX
KW   human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW   phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW   low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW   gall stone; triglyceridaemia; obesity; hepatitis;
KW   hepatocellular carcinoma; aromatase; cytostatic; antilipaemic;
KW   antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW   antiinflammatory; virucidal.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /label= OTHER= phosphorothioate backbone
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
XX
PN   WO2004003201-A2.
XX
PD   08-JAN-2004.
XX
PF   01-JUL-2003; 2003WO-US020865.
XX
PR   01-JUL-2002; 2002US-0392813P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Kane CD;
XX
DR   WPI; 2004-083058/08.
XX
PT   New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT   related homologue-1 (LRH1), useful for treating breast cancer,
PT   dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
PS   Example 15; SEQ ID NO 3393; 909pp; English.
XX
CC   This invention relates to novel antisense compounds useful for modulating
CC   the expression of liver related homologue-1 (LRH1) and splice variants
CC   thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC   length that target a portion of an active site on the nucleic acid
CC   molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC   nuclear receptor protein that functions as a tissue specific
```

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CC   transcription factor. The present invention describes antisense
CC   oligonucleotides that comprise at least one modified internucleoside
CC   linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC   a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC   methylcytidine. These antisense compounds are useful for treating or
CC   diagnosing a disease associated with LRH1, such as breast cancer,
CC   dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC   LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC   triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC   hepatitis, as well as hepatocellular carcinoma or a condition associated
CC   with aromatase activity. Accordingly, these compositions exhibit
CC   cytostatic, antilipaemic, antiarteriosclerotic, anorectic, hepatotropic,
CC   litholytic, antiinflammatory and virucidal activities. This
CC   oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC   expression of the human LRH1 protein of the invention.
XX
SQ   Sequence 20 BP; 8 A; 6 C; 4 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1607 AGTTCTAAGCCACAGAC 1623
              || |||||| |||||||
Db          2 AGGTCTAAGACACAGAC 18


RESULT 1625
ADJ15753/c
ID   ADJ15753 standard; DNA; 20 BP.
XX
AC   ADJ15753;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Antisense DNA oligo used to modulate human LRH1 expression SeqID 303.
XX
KW   human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW   phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW   low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW   gall stone; triglyceridaemia; obesity; hepatitis;
KW   hepatocellular carcinoma; aromatase; cytostatic; antilipaemic;
KW   antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW   antiinflammatory; virucidal.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /label= OTHER= phosphorothioate backbone
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
XX
PN   WO2004003201-A2.
XX
PD   08-JAN-2004.
XX
PF   01-JUL-2003; 2003WO-US020865.
XX
PR   01-JUL-2002; 2002US-0392813P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Kane CD;
XX
DR   WPI; 2004-083058/08.
XX
PT   New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT   related homologue-1 (LRH1), useful for treating breast cancer,
PT   dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
PS   Example 15; SEQ ID NO 303; 909pp; English.
XX
CC   This invention relates to novel antisense compounds useful for modulating
CC   the expression of liver related homologue-1 (LRH1) and splice variants
CC   thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC   length that target a portion of an active site on the nucleic acid
CC   molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC   nuclear receptor protein that functions as a tissue specific
CC   transcription factor. The present invention describes antisense
CC   oligonucleotides that comprise at least one modified internucleoside
CC   linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC   a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC   methylcytidine. These antisense compounds are useful for treating or
CC   diagnosing a disease associated with LRH1, such as breast cancer,
CC   dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC   LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC   triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC   hepatitis, as well as hepatocellular carcinoma or a condition associated
CC   with aromatase activity. Accordingly, these compositions exhibit
CC   cytostatic, antilipaemic, antiarteriosclerotic, anorectic, hepatotropic,
CC   litholytic, antiinflammatory and virucidal activities. This
CC   oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC   expression of the human LRH1 protein of the invention.
XX
SQ   Sequence 20 BP; 1 A; 7 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        853 GACAAGGACCTGAAGCA 869
              |||| || |||||||||
Db         18 GACAGGGCCCTGAAGCA 2


RESULT 1626
ADJ18877
ID   ADJ18877 standard; DNA; 20 BP.
XX
AC   ADJ18877;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Antisense DNA oligo used to modulate human LRH1 expression SeqID 3427.
XX
KW   human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW   phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW   low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW   gall stone; triglyceridaemia; obesity; hepatitis;
KW   hepatocellular carcinoma; aromatase; cytostatic; antilipaemic;
KW   antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW   antiinflammatory; virucidal.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /label= OTHER= phosphorothioate backbone
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
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FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
XX
PN   WO2004003201-A2.
XX
PD   08-JAN-2004.
XX
PF   01-JUL-2003; 2003WO-US020865.
XX
PR   01-JUL-2002; 2002US-0392813P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Kane CD;
XX
DR   WPI; 2004-083058/08.
XX
PT   New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT   related homologue-1 (LRH1), useful for treating breast cancer,
PT   dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
PS   Example 15; SEQ ID NO 3427; 909pp; English.
XX
CC   This invention relates to novel antisense compounds useful for modulating
CC   the expression of liver related homologue-1 (LRH1) and splice variants
CC   thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC   length that target a portion of an active site on the nucleic acid
CC   molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC   nuclear receptor protein that functions as a tissue specific
CC   transcription factor. The present invention describes antisense
CC   oligonucleotides that comprise at least one modified internucleoside
CC   linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC   a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC   methylcytidine. These antisense compounds are useful for treating or
CC   diagnosing a disease associated with LRH1, such as breast cancer,
CC   dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC   LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC   triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC   hepatitis, as well as hepatocellular carcinoma or a condition associated
CC   with aromatase activity. Accordingly, these compositions exhibit
CC   cytostatic, antilipaemic, antiarteriosclerotic, anorectic, hepatotropic,
CC   litholytic, antiinflammatory and virucidal activities. This
CC   oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC   expression of the human LRH1 protein of the invention.
XX
SQ   Sequence 20 BP; 8 A; 5 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1607 AGTTCTAAGCCACAGAC 1623
              || |||||| |||||||
Db          3 AGGTCTAAGACACAGAC 19


RESULT 1627
ADJ17468/c
ID   ADJ17468 standard; DNA; 20 BP.
XX
AC   ADJ17468;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Antisense DNA oligo used to modulate human LRH1 expression SeqID 2018.
XX
KW   human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW   phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW   low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW   gall stone; triglyceridaemia; obesity; hepatitis;
KW   hepatocellular carcinoma; aromatase; cytostatic; antilipaemic;
KW   antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW   antiinflammatory; virucidal.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /label= OTHER= phosphorothioate backbone
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT                   cytidine nucleobases are 5-methylcytidine."
XX
PN   WO2004003201-A2.
XX
PD   08-JAN-2004.
XX
PF   01-JUL-2003; 2003WO-US020865.
XX
PR   01-JUL-2002; 2002US-0392813P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Kane CD;
XX
DR   WPI; 2004-083058/08.
XX
PT   New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT   related homologue-1 (LRH1), useful for treating breast cancer,
PT   dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
PS   Example 15; SEQ ID NO 2018; 909pp; English.
XX
CC   This invention relates to novel antisense compounds useful for modulating
CC   the expression of liver related homologue-1 (LRH1) and splice variants
CC   thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC   length that target a portion of an active site on the nucleic acid
CC   molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC   nuclear receptor protein that functions as a tissue specific
CC   transcription factor. The present invention describes antisense
CC   oligonucleotides that comprise at least one modified internucleoside
CC   linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC   a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC   methylcytidine. These antisense compounds are useful for treating or
CC   diagnosing a disease associated with LRH1, such as breast cancer,
CC   dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC   LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC   triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC   hepatitis, as well as hepatocellular carcinoma or a condition associated
CC   with aromatase activity. Accordingly, these compositions exhibit
CC   cytostatic, antilipaemic, antiarteriosclerotic, anorectic, hepatotropic,
CC   litholytic, antiinflammatory and virucidal activities. This
CC   oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC   expression of the human LRH1 protein of the invention.
XX
SQ   Sequence 20 BP; 4 A; 1 C; 9 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;
```

```
Qy       1448 AACATCCATTCTTCCTC 1464
              ||||||||  |||  ||||
Db         20 AACATCCACTCTGCCTC 4
```

RESULT 1628
ADJ15597/c
ID ADJ15597 standard; DNA; 20 BP.
XX
AC ADJ15597;
XX
DT 20-MAY-2004 (first entry)
XX
DE Antisense DNA oligo used to modulate human LRH1 expression SeqID 147.
XX
KW human; ss; liver related homologue-1; LRH1; NR5A2; antisense;
KW phosphorothioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis;
KW low HDL; high density lipoprotein; high LDL; hypercholesterolaemia;
KW gall stone; triglyceridaemia; obesity; hepatitis;
KW hepatocellular carcinoma; aromatase; cytostatic; antilipaemic;
KW antiarteriosclerotic; anorectic; hepatotropic; litholytic;
KW antiinflammatory; virucidal.
XX
OS Homo sapiens.
OS Synthetic.
XX

FH	Key	Location/Qualifiers
FT	modified_base	1. .20
FT		/*tag= b
FT		/mod_base= OTHER
FT		/label= OTHER= phosphorothioate backbone
FT	modified_base	1. .5
FT		/*tag= a
FT		/mod_base= OTHER
FT		/note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT		cytidine nucleobases are 5-methylcytidine."
FT	modified_base	16. .20
FT		/*tag= c
FT		/mod_base= OTHER
FT		/note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
FT		cytidine nucleobases are 5-methylcytidine."

XX
PN WO2004003201-A2.
XX
PD 08-JAN-2004.
XX
PF 01-JUL-2003; 2003WO-US020865.
XX
PR 01-JUL-2002; 2002US-0392813P.
XX
PA (PHAA) PHARMACIA CORP.
XX
PI Kane CD;
XX
DR WPI; 2004-083058/08.
XX
PT New antisense oligonucleotides targeted to a nucleic acid encoding liver
PT related homologue-1 (LRH1), useful for treating breast cancer,
PT dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
XX
PS Example 15; SEQ ID NO 147; 909pp; English.
XX
CC This invention relates to novel antisense compounds useful for modulating
CC the expression of liver related homologue-1 (LRH1) and splice variants
CC thereof. Specifically, it refers to compositions 8-30 nucleobases in
CC length that target a portion of an active site on the nucleic acid
CC molecule encoding LRH1 (also known as NR5A2). LRH1 is a monomeric orphan
CC nuclear receptor protein that functions as a tissue specific
CC transcription factor. The present invention describes antisense
CC oligonucleotides that comprise at least one modified internucleoside
CC linkage, a phosphorothioate linkage; at least one modified sugar moiety,
CC a 2'-O-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-
CC methylcytidine. These antisense compounds are useful for treating or
CC diagnosing a disease associated with LRH1, such as breast cancer,
CC dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
CC LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
CC triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic
CC hepatitis, as well as hepatocellular carcinoma or a condition associated
CC with aromatase activity. Accordingly, these compositions exhibit
CC cytostatic, antilipaemic, antiarteriosclerotic, anorectic, hepatotropic,
CC litholytic, antiinflammatory and virucidal activities. This
CC oligonucleotide sequence is an antisense DNA oligo used to modulate the
CC expression of the human LRH1 protein of the invention.
XX
SQ Sequence 20 BP; 1 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

```
  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        853 GACAAGGACCTGAAGCA 869
              ||||  ||  |||||||||
Db         19 GACAGGGCCCTGAAGCA 3
```

RESULT 1629
ADK12315/c
ID ADK12315 standard; DNA; 20 BP.
XX
AC ADK12315;
XX
DT 20-MAY-2004 (first entry)
XX
DE Mouse complement component C3 DNA, antisense oligonucleotide #61.
XX
KW Antisense therapy; mouse; complement component C3; autoimmune disorder;
KW multiple sclerosis; infection; atherosclerosis; neuroprotective;
KW antiarteriosclerotic; antimicrobial; antiinflammatory; cytostatic;
KW phosphorothioate; ss.
XX
OS Mus musculus.
XX

FH	Key	Location/Qualifiers
FT	modified_base	1. .20
FT		/*tag= a
FT		/mod_base= OTHER
FT		/note= "This oligonucleotide has a phosphorothioate
FT		backbone and 2'-methyoxyethyl (2'-MOE) wings at the 5'
FT		and 3' ends, which are 5 nucleotides in length at each
FT		end. All cytidine residues are 5-methylcytidines"

XX
PN US2004043956-A1.
XX
PD 04-MAR-2004.
XX
PF 18-AUG-2003; 2003US-00642802.
XX
PR 23-OCT-2001; 2001US-00001076.
XX
PA (GRAH/) GRAHAM M J.
PA (WATT/) WATT A T.
XX
PI Graham MJ, Watt AT;
XX
DR WPI; 2004-225730/21.
XX
PT New antisense compound targeted to a nucleic acid molecule encoding
PT complement component C3, useful for treating multiple sclerosis, an
PT infection or atherosclerosis.
XX
PS Example 16; SEQ ID NO 173; 74pp; English.
XX
CC The present invention relates to antisense compounds targeted to a
CC nucleic acids encoding human and mouse complement component C3. The
CC antisense compound comprises an antisense oligonucleotide that
CC specifically hybridises with the nucleic acid and inhibits the expression

CC of complement component C3 in cells. The antisense oligonucleotide is a
CC chimeric oligonucleotide. The antisense oligonucleotide comprises at
CC least one modified internucleoside linkage, preferably a phosphorothioate
CC linkage. It also comprises at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide
CC further comprises at least one modified nucleobase, preferably a 5-
CC methylcytosine. The antisense oligonucleotides are useful for the
CC treatment of diseases such as autoimmune disorders e.g. multiple
CC sclerosis, infections, and atherosclerosis. The present sequence
CC represents an antisense oligonucleotide used in the examples of the
CC present invention.
XX
SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 391 TCGGATGAGGTGCAGTC 407
|| |||||||||||| |
Db 20 TCAGATGAGGTGCAGGC 4

RESULT 1630
ADJ26672
ID ADJ26672 standard; DNA; 20 BP.
XX
AC ADJ26672;
XX
DT 20-MAY-2004 (first entry)
XX
DE Candida tropicalis CYP gene PCR primer #43.
XX
KW CYP gene; CPRA protein; CPRB protein; dicarboxylic acid; plastic;
KW adhesive; fragrance; PCR; primer; ss.
XX
OS Candida tropicalis.
XX
PN US2003186411-A1.
XX
PD 02-OCT-2003.
XX
PF 03-APR-2003; 2003US-00405660.
XX
PR 01-MAY-1998; 98US-0083798P.
PR 05-OCT-1998; 98US-0103099P.
PR 10-MAR-1999; 99US-0123555P.
PR 30-APR-1999; 99US-00302620.
PR 12-OCT-2001; 2001US-00976800.
XX
PA (WILS/) WILSON C R.
PA (CRAF/) CRAFT D L.
PA (EIRI/) EIRICH L D.
PA (ESHO/) ESHOO M.
PA (MADD/) MADDURI K M.
PA (CORN/) CORNETT C A.
PA (BREN/) BRENNER A A.
PA (TANG/) TANG M.
PA (LOPE/) LOPER J C.
PA (GLEE/) GLEESON M.
XX
PI Wilson CR, Craft DL, Eirich LD, Eshoo M, Madduri KM, Cornett CA;
PI Brenner AA, Tang M, Loper JC, Gleeson M;
XX
DR WPI; 2004-088917/09.
XX
PT New isolated nucleic acid encoding a CPRA protein, used to increase
PT production of dicarboxylic acid, for use in chemical products including
PT plastics, adhesives, and fragrances.
XX
PS Example 11; SEQ ID NO 47; 195pp; English.
XX
CC The invention comprises CYP genes from Candida tropicalis which encode
CC CPRA and CPRB proteins. The invention is useful for CPRA and CPRB protein
CC production, the DNA and protein sequences are useful for increasing
CC production of dicarboxylic acid in chemical products, such as: plastics,
CC adhesives and fragrances. The present DNA sequence represents a PCR
CC primer that was used in an example of the invention.
XX
SQ Sequence 20 BP; 7 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1010 AGAGGGGAGAGCTCAAG 1026
|||||| || |||||||
Db 2 AGAGGGCAGGGCTCAAG 18

RESULT 1631
ADL81342/c
ID ADL81342 standard; DNA; 20 BP.
XX
AC ADL81342;
XX
DT 20-MAY-2004 (first entry)
XX
DE Gene 216 SSCP primer #92.
XX
KW asthma; bronchial hyperresponsiveness; obesity;
KW inflammatory bowel disease; human; gene 216; ss; primer.
XX
OS Homo sapiens.
XX
PN US2004023215-A1.
XX
PD 05-FEB-2004.
XX
PF 19-APR-2002; 2002US-00126022.
XX
PR 13-APR-1999; 99US-0129391P.
PR 13-APR-2000; 2000US-00548797.
PR 13-APR-2001; 2001US-00834597.
XX
PA (KEIT/) KEITH T.
PA (LITT/) LITTLE R D.
PA (EERD/) EERDEWEGH P V.
PA (DUPU/) DUPUIS J.
PA (DMAS/) DEL MASTRO R G.
PA (SIMO/) SIMON J.
PA (ALLE/) ALLEN K.
PA (PAND/) PANDIT S.
XX
PI Keith T, Little RD, Eerdewegh PV, Dupuis J, Del Mastro RG;
PI Simon J, Allen K, Pandit S;
XX
DR WPI; 2004-142647/14.
XX
PT New isolated nucleic acid molecules useful for diagnosing or treating
PT asthma or bronchial hyperresponsiveness, or other diseases such as
PT obesity or inflammatory bowel disease.
XX
PS Example 10; SEQ ID NO 154; 485pp; English.
XX
CC The invention relates to an isolated nucleic acid molecule, or a set of
CC nucleic acid molecules each given in the specification. The composition
CC and methods are useful in diagnosing or treating asthma or bronchial
CC hyperresponsiveness, and other diseases such as obesity or inflammatory
CC bowel disease. The present sequence is used in the exemplification of the
CC present invention.
XX
SQ Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;

```
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        538 CCCATCTTTGACAAGCC 554
              ||| ||| |||||||||
Db         19 CCCTTCTGTGACAAGCC 3


RESULT 1632
ADL81282
ID   ADL81282 standard; DNA; 20 BP.
XX
AC   ADL81282;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Gene 216 SSCP primer #32.
XX
KW   asthma; bronchial hyperresponsiveness; obesity;
KW   inflammatory bowel disease; human; gene 216; ss; primer.
XX
OS   Homo sapiens.
XX
PN   US2004023215-A1.
XX
PD   05-FEB-2004.
XX
PF   19-APR-2002; 2002US-00126022.
XX
PR   13-APR-1999;   99US-0129391P.
PR   13-APR-2000; 2000US-00548797.
PR   13-APR-2001; 2001US-00834597.
XX
PA   (KEIT/) KEITH T.
PA   (LITT/) LITTLE R D.
PA   (EERD/) EERDEWEGH P V.
PA   (DUPU/) DUPUIS J.
PA   (DMAS/) DEL MASTRO R G.
PA   (SIMO/) SIMON J.
PA   (ALLE/) ALLEN K.
PA   (PAND/) PANDIT S.
XX
PI   Keith T,  Little RD,  Eerdewegh PV,  Dupuis J,  Del Mastro RG;
PI   Simon J,  Allen K,  Pandit S;
XX
DR   WPI; 2004-142647/14.
XX
PT   New isolated nucleic acid molecules useful for diagnosing or treating
PT   asthma or bronchial hyperresponsiveness, or other diseases such as
PT   obesity or inflammatory bowel disease.
XX
PS   Example 10; SEQ ID NO 94; 485pp; English.
XX
CC   The invention relates to an isolated nucleic acid molecule, or a set of
CC   nucleic acid molecules each given in the specification. The composition
CC   and methods are useful in diagnosing or treating asthma or bronchial
CC   hyperresponsiveness, and other diseases such as obesity or inflammatory
CC   bowel disease. The present sequence is used in the exemplification of the
CC   present invention.
XX
SQ   Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        538 CCCATCTTTGACAAGCC 554
              ||| ||| |||||||||
Db          2 CCCTTCTGTGACAAGCC 18


RESULT 1633
ADL32383
ID   ADL32383 standard; DNA; 20 BP.
XX
AC   ADL32383;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Clone specific PCR primer to amplify human full length cDNA SeqID 4416.
XX
KW   human; medicine; signal transduction; glycoprotein; transcription;
KW   oligo-capping method; ss; PCR; primer.
XX
OS   Homo sapiens.
XX
PN   EP1396543-A2.
XX
PD   10-MAR-2004.
XX
PF   07-JUL-2000; 2003EP-00025638.
XX
PR   08-JUL-1999;   99JP-00194486.
PR   11-JAN-2000; 2000JP-00118774.
PR   02-MAY-2000; 2000JP-00183865.
PR   07-JUL-2000; 2000EP-00114089.
XX
PA   (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI   Ota T,  Nishikawa T,  Isogai T,  Hayashi K,  Ishii S,  Kawai Y;
PI   Wakamatsu A,  Sugiyama T,  Nagai K,  Kojima S,  Otsuki T,  Koga H;
XX
DR   WPI; 2004-204755/20.
XX
PT   New oligonucleotide primers (830 cDNAs) useful for synthesizing full
PT   length human cDNAs.
XX
PS   Example 18; SEQ ID NO 4416; 1340pp; English.
XX
CC   This invention relates to a novel primers useful for synthesising full
CC   length cDNA molecules that encode human proteins. Specifically, it refers
CC   to secretory or membrane proteins that are potential therapeutic agents/
CC   target molecules in the field of medicine, and in particular genes
CC   encoding proteins that are associated with signal transduction,
CC   glycoproteins and transcription. The present invention describes a method
CC   for efficiently cloning a full length human cDNA from both the 5' and 3'
CC   ends using the oligo-capping method. This oligonucleotide sequence is a
CC   human clone specific PCR primer used in an exemplification of the
CC   invention.
XX
SQ   Sequence 20 BP; 7 A; 3 C; 8 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         19 TGGACAGGAATGCAGAG 35
              ||||||| | ||||||
Db          4 TGGACAGGCAAGCAGAG 20


RESULT 1634
ADM93686/c
ID   ADM93686 standard; DNA; 20 BP.
XX
AC   ADM93686;
XX
DT   01-JUL-2004  (first entry)
XX
DE   Human NOVX PCR primer #24.
XX
KW   Human; NOVX; PCR; ss; congenital heart defect; cardiomyopathy;
KW   atherosclerosis; hypertension; pulmonary stenosis; scleroderma;
KW   adenocarcinoma; haemophilia; graft-versus-host disease; cancer;
KW   neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW   multiple sclerosis; diabetes; obesity; bronchial asthma;
KW   acquired immunodeficiency syndrome; AIDS; Crohn's disease;
```

KW infectious disease; anorexia; immune disorder; primer.
XX
OS Homo sapiens.
XX
PN US2004067882-A1.
XX
PD 08-APR-2004.
XX
PF 05-NOV-2002; 2002US-00287971.
XX
PR 22-OCT-2001; 2001US-00035568.
PR 05-NOV-2001; 2001US-0338626P.
PR 06-NOV-2001; 2001US-0333072P.
PR 09-NOV-2001; 2001US-0345398P.
PR 09-NOV-2001; 2001US-0348283P.
PR 15-NOV-2001; 2001US-0335610P.
PR 21-NOV-2001; 2001US-0332152P.
PR 28-NOV-2001; 2001US-0333912P.
PR 29-NOV-2001; 2001US-00997425.
PR 29-NOV-2001; 2001US-0334300P.
PR 04-DEC-2001; 2001US-0336576P.
PR 05-FEB-2002; 2002US-0354807P.
PR 15-MAY-2002; 2002US-0380968P.
PR 16-MAY-2002; 2002US-0381043P.
PR 02-JUL-2002; 2002US-0393148P.
PR 02-JUL-2002; 2002US-0393262P.
PR 06-AUG-2002; 2002US-0401479P.
PR 06-AUG-2002; 2002US-0401626P.
PR 07-AUG-2002; 2002US-0401593P.
PR 07-AUG-2002; 2002US-0401695P.
PR 26-AUG-2002; 2002US-0406181P.
XX
PA (ALSO/) ALSOBROOK J P.
PA (ALVA/) ALVAREZ E.
PA (ANDE/) ANDERSON D W.
PA (BARO/) BARON M.
PA (BOLD/) BOLDOG F L.
PA (BURG/) BURGESS C E.
PA (CASM/) CASMAN S J.
PA (CHAP/) CHAPOVAL A.
PA (DHAN/) DHANABAL M.
PA (EDIN/) EDINGER S R.
PA (EISE/) EISEN A.
PA (ELLE/) ELLERMAN K.
PA (ETTE/) ETTENBERG S.
PA (GANG/) GANGOLLI E A.
PA (GERL/) GERLACH V.
PA (GORM/) GORMAN L.
PA (GROS/) GROSSE W M.
PA (GUOX/) GUO X.
PA (HACK/) HACKETT C.
PA (JIWW/) JI W.
PA (KEKU/) KEKUDA R.
PA (KHRA/) KHRAMTSOV N V.
PA (LEPL/) LEPLEY D M.
PA (LILL/) LI L.
PA (MACD/) MACDOUGALL J R.
PA (MALY/) MALYANKAR U M.
PA (MAZU/) MAZUR A.
PA (MCQU/) MCQUEENEY K.
PA (MEZE/) MEZES P S.
PA (MILL/) MILLER C E.
PA (MILL/) MILLET I.
PA (MISH/) MISHRA V.
PA (PADI/) PADIGARU M.
PA (PATT/) PATTURAJAN M.
PA (PENA/) PENA C E A.
PA (PEYM/) PEYMAN J A.
PA (RAST/) RASTELLI L.
PA (RIEG/) RIEGER D K.
PA (ROTH/) ROTHENBERG M E.
PA (SHEN/) SHENOY S G.
PA (SHIM/) SHIMKETS R A.
PA (SMIT/) SMITHSON G.
PA (SPAD/) SPADERNA S K.
PA (STAR/) STARLING G.
PA (SPYT/) SPYTEK K A.
PA (STON/) STONE D J.
PA (TCHE/) TCHERNEV V T.
PA (TWOM/) TWOMLOW N.
PA (VERN/) VERNET C A M.
PA (ZERH/) ZERHUSEN B D.
PA (VOSS/) VOSS E Z.
PA (ZHON/) ZHONG M.
XX
PI Alsobrook JP, Alvarez E, Anderson DW, Baron M, Boldog FL;
PI Burgess CE, Casman SJ, Chapoval A, Dhanabal M, Edinger SR, Eisen A;
PI Ellerman K, Ettenberg S, Gangolli EA, Gerlach V, Gorman L;
PI Grosse WM, Guo X, Hackett C, Ji W, Kekuda R, Khramtsov NV;
PI Lepley DM, Li L, Macdougall JR, Malyankar UM, Mazur A, Mcqueeney K;
PI Mezes PS, Miller CE, Millet I, Mishra V, Padigaru M, Patturajan M;
PI Pena CEA, Peyman JA, Rastelli L, Rieger DK, Rothenberg ME;
PI Shenoy SG, Shimkets RA, Smithson G, Spaderna SK, Starling G;
PI Spytek KA, Stone DJ, Tchernev VT, Twomlow N, Vernet CAM;
PI Zerhusen BD, Voss EZ, Zhong M;
XX
DR WPI; 2004-355303/33.
XX
PT Novel isolated NOVX polypeptide useful treating or preventing disorders
PT or syndromes such as Alzheimer's disease, Parkinson's disease, multiple
PT sclerosis, diabetes, obesity, cancer, bronchial asthma, Crohn's disease.
XX
PS Example C; SEQ ID NO 318; 330pp; English.
XX
CC The invention relates to human NOVX polypeptides and the polynucleotides
CC encoding them. The NOVX polypeptides and polynucleotides are useful for
CC determining the presence of or predisposition to a disease associated
CC with altered levels of the sequences in a mammalian subject, and for
CC treating or preventing a pathology associated with NOVX. The
CC polypeptides, polynucleotides and antibodies that bind immunospecifically
CC to the polypeptides are useful for treating or preventing disorders or
CC syndromes such as congenital heart defects, cardiomyopathy,
CC atherosclerosis, hypertension, pulmonary stenosis, scleroderma,
CC adenocarcinoma, haemophilia, graft-versus-host disease, cancer,
CC neurodegenerative disorders, Alzheimer's disease, Parkinson's disease,
CC multiple sclerosis, diabetes, obesity, bronchial asthma, acquired
CC immunodeficiency syndrome (AIDS), Crohn's disease, infectious disease,
CC anorexia and immune disorders. This sequence represents a PCR primer used
CC to amplify a human NOVX polynucleotide of the invention. Note: The
CC sequence data for this patent is also available from USPTO at
CC seqdata.uspto.gov/sequence.html.
XX
SQ Sequence 20 BP; 10 A; 3 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1240 TTCATCTTCCGTATCTT 1256
||||||||||| || ||
Db 18 TTCATCTTCCGCATTTT 2

RESULT 1635
ADM14790/c
ID ADM14790 standard; DNA; 20 BP.
XX
AC ADM14790;
XX
DT 01-JUL-2004 (first entry)
XX
DE Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:977.
XX
KW chimeric; antisense oligonucleotide; phosphorothioate; human;
KW microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;

```
KW   immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW   neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW   immunomodulatory; cardiovascular; gene therapy; inflammation;
KW   Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW   reperfusion injury; ophthalmic disorder; immunological disorder;
KW   cardiovascular disorder; neurological disorder; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate linkages and all cytidine
FT                   residues are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methocyethyls"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methoxyethyls"
XX
PN   WO2004028458-A2.
XX
PD   08-APR-2004.
XX
PF   25-SEP-2003; 2003WO-US030374.
XX
PR   25-SEP-2002; 2002US-0413549P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Gierse JK;
XX
DR   WPI; 2004-305094/28.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT   inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT   ischemia.
XX
PS   Claim 4; SEQ ID NO 977; 132pp; English.
XX
CC   The present sequence represents a chimeric antisense oligonucleotide
CC   targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC   human mPGES-1 gene is located on chromosome 9, more specifically to
CC   9q34.3. The present invention also describes: (1) antisense compounds,
CC   having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC   mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC   inhibits its expression; (2) a method of inhibiting the expression of
CC   mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC   having a disease or condition associated with mPGES-1. MPGES-1 chimeric
CC   antisense oligonucleotides and antisense compounds have cytostatic,
CC   antidiabetic, immunomodulator, cardiant, neuroprotective,
CC   antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic,
CC   ophthalmological, immunomodulatory and cardiovascular activities, and can
CC   be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC   can be used for preparing a composition for treating a disease or
CC   condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC   disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC   ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ   Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match              0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1435 GAGGATGCCATGAAACA 1451
              ||||||||| ||| |||
Db         19 GAGGATGCCCTGAGACA 3


RESULT 1636
ADM14933/c
ID   ADM14933 standard; DNA; 20 BP.
XX
AC   ADM14933;
XX
DT   01-JUL-2004  (first entry)
XX
DE   Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:1120.
XX
KW   chimeric; antisense oligonucleotide; phosphorothioate; human;
KW   microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor;
KW   microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic;
KW   immunomodulator; cardiant; neuroprotective; antiinflammatory;
KW   neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological;
KW   immunomodulatory; cardiovascular; gene therapy; inflammation;
KW   Alzheimer's disease; arthritis; diabetes; cancer; ischaemia;
KW   reperfusion injury; ophthalmic disorder; immunological disorder;
KW   cardiovascular disorder; neurological disorder; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate linkages and all cytidine
FT                   residues are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methocyethyls"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-O-methoxyethyls"
XX
PN   WO2004028458-A2.
XX
PD   08-APR-2004.
XX
PF   25-SEP-2003; 2003WO-US030374.
XX
PR   25-SEP-2002; 2002US-0413549P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Gierse JK;
XX
DR   WPI; 2004-305094/28.
XX
PT   New antisense compound, having a sequence targeted to a nucleic acid
PT   encoding mPGES-1, useful for preparing a composition for treating e.g.,
PT   inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
PT   ischemia.
XX
PS   Claim 4; SEQ ID NO 1120; 132pp; English.
XX
CC   The present sequence represents a chimeric antisense oligonucleotide
CC   targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The
CC   human mPGES-1 gene is located on chromosome 9, more specifically to
CC   9q34.3. The present invention also describes: (1) antisense compounds,
CC   having a sequence comprising 8-30 bp targeted to a nucleic acid encoding
CC   mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and
CC   inhibits its expression; (2) a method of inhibiting the expression of
CC   mPGES-1 in cells or tissues; and (3) a method of treating an animal
CC   having a disease or condition associated with mPGES-1. MPGES-1 chimeric
CC   antisense oligonucleotides and antisense compounds have cytostatic,
CC   antidiabetic, immunomodulator, cardiant, neuroprotective,
```

CC *antiinflammatory*, neuroprotective, nootropic, antiarthritic, vasotropic,
CC ophthalmological, immunomodulatory and cardiovascular activities, and can
CC be used as mPGES-1 inhibitors and in gene therapy. The antisense compound
CC can be used for preparing a composition for treating a disease or
CC condition associated with mPGES-1 e.g., inflammation, Alzheimer's
CC disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or
CC ophthalmic, immunological, cardiovascular or neurological disorder.
XX
SQ Sequence 20 BP; 2 A; 8 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1435 GAGGATGCCATGAAACA 1451
||||||||| ||| |||
Db 20 GAGGATGCCCTGAGACA 4

RESULT 1637
ADO46783
ID ADO46783 standard; DNA; 20 BP.
XX
AC ADO46783;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human oligonucleotide #2149.
XX
KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
OS Homo sapiens.
XX
PN US2004049022-A1.
XX
PD 11-MAR-2004.
XX
PF 25-JUL-2003; 2003US-00627930.
XX
PR 23-APR-2002; 2002WO-US013135.
PR 23-APR-2002; 2002WO-US013143.
XX
PA (NYCE/) NYCE J W.
PA (SAND/) SANDRASAGRA A.
PA (TANG/) TANG L.
PA (AGUI/) AGUILAR D.
PA (MILL/) MILLER S.
PA (SHAH/) SHAHABUDDIN S.
PA (LUHH/) LU H.
PA (CONG/) CONG H.
XX
PI Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX
DR WPI; 2004-293804/27.
XX
PT Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
PT asthma.
XX
PS Claim 2; SEQ ID NO 2249; 174pp; English.
XX
CC The invention relates to oligonucleotides anti-sense to an initiation
CC codon, coding region, 5' or 3' intron-exon junction, intron or region
CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
CC also relates to a method of screening a candidate compound that binds to
CC one or more nucleic acid target(s) or expressed product(s), for the
CC prevention and/or treatment of a respiratory or lung disease. The
CC oligonucleotides are useful for reducing or inhibiting expression of a
CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC useful for preventing or treating a respiratory or lung disease. The
CC respiratory or lung disease is associated with hyper-responsiveness to
CC and/or increased levels of, adenosine and/or levels of adenosine A
CC receptor(s), and/or asthma and/or lung allergies associated with
CC inflammation or an inflammatory disease. The respiratory or lung disease
CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC hypertension, lung inflammation, bronchitis, airway obstruction or
CC bronchoconstriction. This sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 6 A; 4 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1444 ATGAAACATCCATTCTT 1460
||||| ||||||| |||
Db 2 ATGAAGCATCCATACTT 18

RESULT 1638
ADO44942
ID ADO44942 standard; DNA; 20 BP.
XX
AC ADO44942;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human oligonucleotide #308.
XX
KW Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5;
KW CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a;
KW tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 D; respiratory disease;
KW lung disease; hyper-responsiveness; adenosine; adenosine A receptor;
KW asthma; lung allergy; inflammation; inflammatory disease;
KW airway inflammation; allergy; impeded respiration; cystic fibrosis; CF;
KW chronic obstructive pulmonary disease; COPD; allergic rhinitis;
KW acute respiratory distress syndrome; pulmonary hypertension;
KW lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
XX
OS Homo sapiens.
XX
PN US2004049022-A1.
XX
PD 11-MAR-2004.
XX
PF 25-JUL-2003; 2003US-00627930.
XX
PR 23-APR-2002; 2002WO-US013135.
PR 23-APR-2002; 2002WO-US013143.
XX
PA (NYCE/) NYCE J W.
PA (SAND/) SANDRASAGRA A.
PA (TANG/) TANG L.
PA (AGUI/) AGUILAR D.
PA (MILL/) MILLER S.
PA (SHAH/) SHAHABUDDIN S.
PA (LUHH/) LU H.
PA (CONG/) CONG H.

XX
PI Nyce JW, Sandrasagra A, Tang L, Aguilar D, Miller S;
PI Shahabuddin S, Lu H, Cong H;
XX
DR WPI; 2004-293804/27.
XX
PT Novel single or multiple target oligonucleotide anti-sense to e.g.
PT initiation codon, intron of respiratory disease-relevant gene e.g. CCR1,
PT RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
PT asthma.
XX
PS Claim 2; SEQ ID NO 308; 174pp; English.
XX
CC The invention relates to oligonucleotides anti-sense to an initiation
CC codon, coding region, 5' or 3' intron-exon junction, intron or region
CC with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid target
CC chosen from a gene encoding interleukin (IL)-4 receptor, interleukin (IL)
CC -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM,
CC tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention
CC also relates to a method of screening a candidate compound that binds to
CC one or more nucleic acid target(s) or expressed product(s), for the
CC prevention and/or treatment of a respiratory or lung disease. The
CC oligonucleotides are useful for reducing or inhibiting expression of a
CC gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor,
CC CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a,
CC tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are
CC useful for preventing or treating a respiratory or lung disease. The
CC respiratory or lung disease is associated with hyper-responsiveness to
CC and/or increased levels of, adenosine and/or levels of adenosine A
CC receptor(s), and/or asthma and/or lung allergies associated with
CC inflammation or an inflammatory disease. The respiratory or lung disease
CC is chosen from airway inflammation, allergy, asthma, impeded respiration,
CC cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD),
CC allergic rhinitis, acute respiratory distress syndrome, pulmonary
CC hypertension, lung inflammation, bronchitis, airway obstruction or
CC bronchoconstriction. This sequence represents an oligonucleotide of the
CC invention.
XX
SQ Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1444 ATGAAACATCCATTCTT 1460
||||| ||||||| |||
Db 3 ATGAAGCATCCATACTT 19

RESULT 1639
ADM16195
ID ADM16195 standard; DNA; 20 BP.
XX
AC ADM16195;
XX
DT 15-JUL-2004 (first entry)
XX
DE Murine SAC1 DNA PCR primer #422.
XX
KW Mouse; SAC1; PCR; ss; carbohydrate; sweetener; ethanol; obesity;
KW diabetes; alcoholism; antidiabetic; alcohol; anorectic; antialcoholic;
KW primer.
XX
OS Mus musculus.
XX
PN US2004081964-A1.
XX
PD 29-APR-2004.
XX
PF 25-OCT-2002; 2002US-00280183.
XX
PR 25-OCT-2002; 2002US-00280183.
XX
PA (BACH/) BACHMANOV A A.
PA (BEAU/) BEAUCHAMP G K.
PA (LISS/) LI S.
PA (LIXX/) LI X.
PA (REED/) REED D R.
PA (TORD/) TORDOFF M G.
PA (ROSS/) ROSS D A.
PA (OHMA/) OHMAN J D.
PA (CHAT/) CHATTERJEE A.
PA (DJON/) DE JONG P J.
XX
PI Bachmanov AA, Beauchamp GK, Li S, Li X, Reed DR, Tordoff MG;
PI Ross DA, Ohman JD, Chatterjee A, De Jong PJ;
XX
DR WPI; 2004-340133/31.
XX
PT New isolated polynucleotides for sensing carbohydrates, other sweeteners,
PT or ethanol, useful for screening drugs for inhibition or restoration of
PT gene function as antidiabetic, antiobesity or antialcohol consumption
PT therapies.
XX
PS Example 12; SEQ ID NO 465; 148pp; English.
XX
CC The invention relates to SAC1 polypeptides and the polynucleotides
CC encoding them. The polynucleotides contain a variation associated with
CC sensing carbohydrates, other sweeteners or ethanol. The invention also
CC relates to a method for analysing a biomolecule in a biological sample,
CC comprising altering SAC1 activity in the sample and measuring the
CC activity, a method for analysing a polynucleotide in a biological sample,
CC comprising contacting a polynucleotide in a biological sample with a
CC probe where the probe hybridises to a SAC1 polynucleotide to form a
CC hybridisation complex and detecting the hybridisation complex, a method
CC of identifying susceptibility to obesity or diabetes comprising comparing
CC the nucleotide sequence of the suspected SAC1 allele with a wild type
CC nucleotide sequence, where the difference between the suspected allele
CC and the wild-type sequence identifies a sequence variation of the SAC1
CC nucleotide sequence, and a method of treating or preventing obesity,
CC diabetes or alcoholism associated with expression of SAC1, comprising
CC administering to a subject a pharmaceutical composition and a transgenic
CC animal that carries an altered SAC1 allele. The methods and compositions
CC of the invention are useful for screening drugs for inhibition or
CC restoration of gene function as antidiabetic, antiobesity or antialcohol
CC consumption therapies and for identifying sweeteners and alcohols. This
CC sequence represents a PCR primer used to amplify murine SAC1 DNA of the
CC invention.
XX
SQ Sequence 20 BP; 6 A; 3 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 360 TGGGGAGAGTGACCAGG 376
|||||| ||| ||||||
Db 1 TGGGGACAGTTACCAGG 17

RESULT 1640
ADP76418/c
ID ADP76418 standard; DNA; 20 BP.
XX
AC ADP76418;
XX
DT 12-AUG-2004 (first entry)
XX
DE Chimeric phosphorothioate oligonucleotide #217.
XX
KW GFAT; Antidiabetic; Cardiant;
KW Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
KW reperfusion; ss.
XX
OS Synthetic.
XX

```
FH   Key             Location/Qualifiers
FT   modified_base   1. .4
FT                   /*tag=  a
FT                   /mod_base= other
FT                   /note= "2-methoxyethyl wing"
FT   modified_base   17. .20
FT                   /*tag=  b
FT                   /mod_base= other
FT                   /note= "2-methoxyethyl wing"
XX
PN   WO2004035763-A2.
XX
PD   29-APR-2004.
XX
PF   02-OCT-2003; 2003WO-US033332.
XX
PR   17-OCT-2002; 2002US-0419268P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Broschat KO,  Crosby SD;
XX
DR   WPI; 2004-348453/32.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
PT   (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
PT   ischemia/reperfusion injury.
XX
PS   Claim 4; SEQ ID NO 217; 175pp; English.
XX
CC   The present invention relates to a compound which specifically hybridizes
CC   with a nucleic acid molecule encoding GFAT, and inhibits the expression
CC   of GFAT. Specifically claimed are antisense oligonucleotides capable of
CC   modulating the expression of GFAT, and which comprise any of the 3063
CC   sequences of 20 base pairs, given in the specification. The compound,
CC   composition and methods are useful for treating a disease or condition
CC   associated with GFAT, such as a disease or condition, e.g. diabetes, a
CC   cardiovascular or neurological disorder, ischemia/reperfusion injury.
CC   They are also useful in research and diagnostics for modulating the
CC   expression of GFAT. The present sequence represents a chimeric
CC   phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
CC   oligonucleotides inhibit human GFAT expression.
XX
SQ   Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        131 GGATGAAGAAGATCAAA 147
              ||||||||||| ||| |
Db         18 GGATGAAGAAGTTCACA 2


RESULT 1641
ADP76359/c
ID   ADP76359 standard; DNA; 20 BP.
XX
AC   ADP76359;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Chimeric phosphorothioate oligonucleotide #158.
XX
KW   GFAT; Antidiabetic; Cardiant;
KW   Glutamine-fructose-6-phosphate amidotransferase; diabetes; ischemia;
KW   reperfusion; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .4
FT                   /*tag=  a
FT                   /mod_base= other
FT                   /note= "2-methoxyethyl wing"
FT   modified_base   17. .20
FT                   /*tag=  b
FT                   /mod_base= other
FT                   /note= "2-methoxyethyl wing"
XX
PN   WO2004035763-A2.
XX
PD   29-APR-2004.
XX
PF   02-OCT-2003; 2003WO-US033332.
XX
PR   17-OCT-2002; 2002US-0419268P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Broschat KO,  Crosby SD;
XX
DR   WPI; 2004-348453/32.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding glutamine-fructose-6-phosphate amidotransferase
PT   (GFAT), for treating diabetes, a cardiovascular or neurologic disorder,
PT   ischemia/reperfusion injury.
XX
PS   Claim 4; SEQ ID NO 158; 175pp; English.
XX
CC   The present invention relates to a compound which specifically hybridizes
CC   with a nucleic acid molecule encoding GFAT, and inhibits the expression
CC   of GFAT. Specifically claimed are antisense oligonucleotides capable of
CC   modulating the expression of GFAT, and which comprise any of the 3063
CC   sequences of 20 base pairs, given in the specification. The compound,
CC   composition and methods are useful for treating a disease or condition
CC   associated with GFAT, such as a disease or condition, e.g. diabetes, a
CC   cardiovascular or neurological disorder, ischemia/reperfusion injury.
CC   They are also useful in research and diagnostics for modulating the
CC   expression of GFAT. The present sequence represents a chimeric
CC   phosphorothioate oligonucleotide with 2'-MOE wings and a deoxy gap, these
CC   oligonucleotides inhibit human GFAT expression.
XX
SQ   Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        131 GGATGAAGAAGATCAAA 147
              ||||||||||| ||| |
Db         17 GGATGAAGAAGTTCACA 1


RESULT 1642
ADP11154/c
ID   ADP11154 standard; DNA; 20 BP.
XX
AC   ADP11154;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Set 1 right PCR primer for marker probe #168.
XX
KW   transplant rejection; immune system; rheumatoid arthritis; lupus;
KW   inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO2004042346-A2.
XX
PD   21-MAY-2004.
XX
PF   24-APR-2003; 2003WO-US012946.
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XX
PR   24-APR-2002; 2002US-00131831.
PR   20-DEC-2002; 2002US-00325899.
XX
PA   (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX
PI   Wohlgemuth J,  Fry K,  Woodward R,  Ly N,  Prentice J,  Morris M;
PI   Rosenberg S;
XX
DR   WPI; 2004-400724/37.
XX
PT   Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
PT   pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
PT   rejection, in an individual, comprises detecting the expression level of
PT   the genes.
XX
PS   Claim 58; SEQ ID NO 1163; 1762pp; English.
XX
CC   The present invention relates to diagnosing or monitoring transplant
CC   rejection, e.g. cardiac or kidney transplant rejection, in an individual
CC   comprises detecting the expression level of one or more genes. The
CC   methods, system and kits are useful in diagnosing or monitoring
CC   transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
CC   islet, lung, bone marrow or stem cell transplant rejection,
CC   xenotransplant rejection or mechanical organ replacement rejection, in an
CC   individual. The method is also useful in assessing the immune status of
CC   an individual. The methods are also useful in diagnosing and monitoring
CC   diseases that involve the immune system, e.g. rheumatoid arthritis,
CC   lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
CC   viral, bacterial or fungal infection. The present sequence represents a
CC   primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
CC   of allograft rejection and other disorders.
XX
SQ   Sequence 20 BP; 2 A; 8 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1625 GAGGCCCCAGCAGGCAG 1641
              ||||||  ||||||  |||
Db         17 GAGGCCGCAGCAGTCAG 1


RESULT 1643
ADP11872/c
ID   ADP11872 standard; DNA; 20 BP.
XX
AC   ADP11872;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Set 2 left PCR primer for marker probe #224.
XX
KW   transplant rejection; immune system; rheumatoid arthritis; lupus;
KW   inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO2004042346-A2.
XX
PD   21-MAY-2004.
XX
PF   24-APR-2003; 2003WO-US012946.
XX
PR   24-APR-2002; 2002US-00131831.
PR   20-DEC-2002; 2002US-00325899.
XX
PA   (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX
PI   Wohlgemuth J,  Fry K,  Woodward R,  Ly N,  Prentice J,  Morris M;
PI   Rosenberg S;
XX
DR   WPI; 2004-400724/37.
XX
PT   Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
PT   pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
PT   rejection, in an individual, comprises detecting the expression level of
PT   the genes.
XX
PS   Claim 58; SEQ ID NO 1881; 1762pp; English.
XX
CC   The present invention relates to diagnosing or monitoring transplant
CC   rejection, e.g. cardiac or kidney transplant rejection, in an individual
CC   comprises detecting the expression level of one or more genes. The
CC   methods, system and kits are useful in diagnosing or monitoring
CC   transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
CC   islet, lung, bone marrow or stem cell transplant rejection,
CC   xenotransplant rejection or mechanical organ replacement rejection, in an
CC   individual. The method is also useful in assessing the immune status of
CC   an individual. The methods are also useful in diagnosing and monitoring
CC   diseases that involve the immune system, e.g. rheumatoid arthritis,
CC   lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
CC   viral, bacterial or fungal infection. The present sequence represents a
CC   primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
CC   of allograft rejection and other disorders.
XX
SQ   Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       503 CTGAGGGCTACCTGGAG 519
             | | ||||||||||||||
Db        17 CCGTGGGCTACCTGGAG 1


RESULT 1644
ADP10747
ID   ADP10747 standard; DNA; 20 BP.
XX
AC   ADP10747;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Set 1 left PCR primer for marker probe #92.
XX
KW   transplant rejection; immune system; rheumatoid arthritis; lupus;
KW   inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
XX
OS   Homo sapiens.
XX
PN   WO2004042346-A2.
XX
PD   21-MAY-2004.
XX
PF   24-APR-2003; 2003WO-US012946.
XX
PR   24-APR-2002; 2002US-00131831.
PR   20-DEC-2002; 2002US-00325899.
XX
PA   (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX
PI   Wohlgemuth J,  Fry K,  Woodward R,  Ly N,  Prentice J,  Morris M;
PI   Rosenberg S;
XX
DR   WPI; 2004-400724/37.
XX
PT   Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver,
PT   pancreas, pancreatic islet, lung, bone marrow or stem cell transplant
PT   rejection, in an individual, comprises detecting the expression level of
PT   the genes.
XX
PS   Claim 58; SEQ ID NO 756; 1762pp; English.
XX
```

CC The present invention relates to diagnosing or monitoring transplant
CC rejection, e.g. cardiac or kidney transplant rejection, in an individual
CC comprises detecting the expression level of one or more genes. The
CC methods, system and kits are useful in diagnosing or monitoring
CC transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic
CC islet, lung, bone marrow or stem cell transplant rejection,
CC xenotransplant rejection or mechanical organ replacement rejection, in an
CC individual. The method is also useful in assessing the immune status of
CC an individual. The methods are also useful in diagnosing and monitoring
CC diseases that involve the immune system, e.g. rheumatoid arthritis,
CC lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or
CC viral, bacterial or fungal infection. The present sequence represents a
CC primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
CC of allograft rejection and other disorders.
XX
SQ Sequence 20 BP; 7 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 336 CGAGGACTTGAAGATGG 352
||||||||| ||||| ||
Db 4 CGAGGACTGGAAGAAGG 20

RESULT 1645
ADN48631/c
ID ADN48631 standard; DNA; 20 BP.
XX
AC ADN48631;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human Notch3 DNA antisense oligonucleotide #75.
XX
KW Human; Notch3; ss; antisense oligonucleotide; phosphorothioate linkage;
KW 2'-O-methoxyethyl sugar moiety; 5-methylcytosine;
KW hyperproliferative disorder; cancer; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004102390-A1.
XX
PD 27-MAY-2004.
XX
PF 21-NOV-2002; 2002US-00301832.
XX
PR 21-NOV-2002; 2002US-00301832.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Freier SM, Dobie KW;
XX
DR WPI; 2004-399720/37.
XX
PT New compounds, particularly oligonucleotides targeted to a nucleic acid
PT encoding Notch3, useful for treating diseases associated with Notch3,
PT e.g. hyperproliferative disorders.
XX
PS Example 15; SEQ ID NO 86; 74pp; English.
XX
CC The invention relates to a compound targeted to a nucleic acid molecule
CC encoding the human Notch3 polypeptide. The compound is an antisense
CC oligonucleotide that specifically hybridises with the nucleic acid and
CC inhibits expression of the polypeptide. The antisense oligonucleotide
CC comprises at least one modified internucleoside linkage i.e. a
CC phosphorothioate linkage, at least one modified sugar moiety, preferably
CC a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase
CC comprising a 5-methylcytosine. The antisense compounds are useful for
CC modulating the expression of the human Notch3 polypeptide and in
CC preparation of a composition for treating hyperproliferative disorders,
CC e.g. cancer. This sequence represents a human Notch3 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 357 TGATGGGGAGAGTGACC 373
|||| ||| ||||||||
Db 17 TGATCGGGTGAGTGACC 1

RESULT 1646
ADO56652/c
ID ADO56652 standard; DNA; 20 BP.
XX
AC ADO56652;
XX
DT 12-AUG-2004 (first entry)
XX
DE Human presynaptic cytomatrix protein, PCLO, proximal SNP PCR primer #84.
XX
KW gene therapy; human; ss; melanoma;
KW melanoma associated polymorphic variation;
KW presynaptic cytomatrix protein; PCLO; SNP;
KW single nucleotide polymorphism; PCR; primer.
XX
OS Homo sapiens.
XX
PN WO2004044164-A2.
XX
PD 27-MAY-2004.
XX
PF 06-NOV-2003; 2003WO-US035879.
XX
PR 06-NOV-2002; 2002US-0424475P.
PR 23-JUL-2003; 2003US-0489703P.
XX
PA (SEQU-) SEQUENOM INC.
XX
PI Roth RB, Nelson MR, Braun A, Kammerer SM;
XX
DR WPI; 2004-411721/38.
XX
PT Identifying a subject at risk of melanoma, useful for treating melanoma,
PT comprises detecting the presence or absence of one or more polymorphic
PT variations associated with melanoma in a nucleic acid sample from a
PT subject.
XX
PS Example 6; Page 102; 295pp; English.
XX
CC The invention relates to a method of identifying a subject at risk of
CC melanoma comprising detecting the presence or absence of one or more
CC polymorphic variations associated with melanoma in a nucleic acid sample
CC from a subject. Preventing melanoma in a subject comprises detecting the
CC presence or absence of one or more polymorphic variations associated with
CC melanoma in a nucleic acid sample from a subject; and administering a
CC melanoma preventative to a subject in need thereof based upon the
CC presence or absence of the one or more polymorphic variations in the
CC nucleic acid sample. The preventative reduces ultraviolet (UV) light
CC exposure to the subject. The methods, nucleic acids, proteins, and
CC compositions are useful for treating melanoma. The present sequence
CC represents a human presynaptic cytomatrix protein, PCLO, proximal PCR
CC primer.
XX
SQ Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 160 ATGACACTCCGAGGTGG 176

```
                    || ||||||| ||||||
Db          19 ATAACACTCCAAGGTGG 3


RESULT 1647
ADO85087/c
ID   ADO85087 standard; DNA; 20 BP.
XX
AC   ADO85087;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Human adipophilin antisense oligonucleotide seqid 43.
XX
KW   antiarteriosclerotic; adipophilin modulator; adipophilin;
KW   adipophilin inhibitor; breast cancer-1; atherosclerosis; human;
KW   adipophilin; antisense oligonucleotide; antisense technology; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                   are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   15. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004110291-A1.
XX
PD   10-JUN-2004.
XX
PF   10-DEC-2002; 2002US-00317253.
XX
PR   10-DEC-2002; 2002US-00317253.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dobie KW;
XX
DR   WPI; 2004-440368/41.
XX
PT   New antisense oligonucleotide compounds, useful for diagnosing,
PT   preventing and/or treating diseases or conditions associated with
PT   aberrant expression or activity of adipophilin, such as atherosclerosis.
XX
PS   Example 15; SEQ ID NO 43; 36pp; English.
XX
CC   The invention describes a new compound (I) comprises 8-80 nucleobases in
CC   length targeted to a nucleic acid molecule encoding adipophilin, where
CC   the compound specifically hybridises with the nucleic acid and inhibits
CC   the expression of adipophilin. Also described are: a method of inhibiting
CC   the expression of adipophilin in cells or tissues, comprising contacting
CC   the cells or tissues with (I) so that expression of adipophilin is
CC   inhibited; a method of treating an animal having a disease or condition
CC   associated with breast cancer-1, comprising administering (I) to the
CC   animal so that expression of adipophilin is inhibited; a method of
CC   screening for a modulator of adipophilin, comprising contacting a
CC   preferred segment of a nucleic acid molecule encoding adipophilin with
CC   one or more candidate modulators, and identifying for one or more
CC   modulators of adipophilin expression which modulate the expression of
CC   adipophilin; a diagnostic method for identifying a disease state,
CC   comprising identifying the presence of adipophilin in a sample using at
CC   least one of the primers selected from a fully defined sequence of 20, 18
CC   or 23 bp (SEQ ID NO: 5, 6 or 7) as given in the specification; and a kit
CC   or assay comprising (I). The methods and compositions of the present
CC   invention are useful for the diagnosis, prevention and/or treatment of
CC   diseases or conditions associated with aberrant expression or activity of
CC   adipophilin, such as atherosclerosis. This sequence represents a human
CC   adipophilin antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 1 A; 7 C; 4 G; 8 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        187 GACAAGACCAATGGTGC 203
                ||||||||||| || ||
Db         20 GACAAGACCAAAGGGGC 4


RESULT 1648
ADP85732
ID   ADP85732 standard; DNA; 20 BP.
XX
AC   ADP85732;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Human Talin antisense oligonucleotide, ISIS #109176.
XX
KW   Antisense; Talin; muscular disorder; haematologic disorder;
KW   cardiac disorder; hyperproliferative disorder; cancer; human;
KW   phosphorothioate; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone where all cytidine
FT                   residues are 5-methylcytidines"
FT   modified_base   1. .5
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004110705-A1.
XX
PD   10-JUN-2004.
XX
PF   11-SEP-2003; 2003US-00415463.
XX
PR   30-OCT-2000; 2000US-00702251.
PR   30-OCT-2001; 2001WO-US047585.
XX
PA   (BENN/) BENNETT C F.
PA   (COWS/) COWSERT L M.
XX
PI   Bennett CF,  Cowsert LM;
XX
DR   WPI; 2004-440384/41.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding talin, useful for treating muscular, cardiac,
PT   hematologic, or hyperproliferative disorders.
XX
PS   Claim 3; SEQ ID NO 77; 48pp; English.
XX
CC   The invention relates to novel antisense compounds targeted to a nucleic
CC   acid molecule encoding human Talin to and inhibit its expression. The
CC   invention is useful for treating a disease or condition associated with
```

```
CC   Talin such as a disease or condition e.g. muscular, haematologic, cardiac
CC   or hyperproliferative disorder such as cancer. The present sequence is an
CC   antisense oilgonucleotide targeted to human Talin DNA.
XX
SQ   Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1571 ACTCAGGCAGGCCAGCT 1587
              |||| |||||||||| ||
Db          4 ACTCTGGCAGGCCATCT 20


RESULT 1649
ADP74448/c
ID   ADP74448 standard; DNA; 20 BP.
XX
AC   ADP74448;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Human NRF antisense oligonucleotide ISIS264076.
XX
KW   Human; ss; antisense; NRF; NF-kappaB repressing factor;
KW   nuclear factor kappaB; immune response; inflammatory response;
KW   oncogenesis; apoptosis; cell cycle; differentiation; cell migration;
KW   chromosome Xq24-25.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone and all cytidines are 5
FT                    -methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl residue"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl residue"
XX
PN   US2004110156-A1.
XX
PD   10-JUN-2004.
XX
PF   10-DEC-2002; 2002US-00317271.
XX
PR   10-DEC-2002; 2002US-00317271.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dobie KW;
XX
DR   WPI; 2004-440344/41.
XX
PT   New antisense oligonucleotides for modulating NF-kappaB repressing factor
PT   expression, useful for diagnosing, preventing or treating diseases or
PT   conditions involving an immune response.
XX
PS   Example 15; SEQ ID NO 82; 61pp; English.
XX
CC   The invention relates to a compound 8-80 nucleobases in length targeted
CC   to a nucleic acid molecule encoding NF-kappaB repressing factor (NRF). NF
CC   -kappaB (nuclear factor kappaB) is involved in such cellular processes as
CC   the immune response, inflammatory response, oncogenesis, apoptosis, cell
CC   cycle, differentiation and cell migration. The compound (an antisense
CC   oligonucleotide) specifically hybridises with the nucleic acid molecule
CC   encoding NRF (which appears as ADP74371 and comprises nucleotides 469701-
CC   489000 of the X chromosome containing the NRF gene at Xq24-25) and
CC   inhibits the expression of NRF. Also included are inhibiting the
CC   expression of NRF in cells or tissues, screening for a modulator of NRF,
CC   a diagnostic method for identifying a disease state, a kit or assay
CC   device comprising the above compound, and treating an animal having a
CC   disease or condition associated with NRF. The antisense oligonucleotide
CC   is useful for inhibiting the expression of NRF in cells or tissues to
CC   prevent or treat diseases associated with aberrant NRF expression, such
CC   as diseases or conditions involving an immune response. In addition, the
CC   compound is used for diagnostics, prophylaxis, or as research reagents or
CC   kits. The present sequence represents an antisense oligonucleotide
CC   targeting NRF.
XX
SQ   Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1166 TGGGCTGCATCTTCTAT 1182
              ||||||||| |||| ||
Db         20 TGGGCTGCAGCTTCCAT 4


RESULT 1650
ADQ09470/c
ID   ADQ09470 standard; DNA; 20 BP.
XX
AC   ADQ09470;
XX
DT   09-SEP-2004  (first entry)
XX
DE   Murine Angiopoietin-2 DNA antisense oligonucleotide #6.
XX
KW   Mouse; Angiopoietin-2; ss; antisense oligonucleotide;
KW   phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.
XX
OS   Mus musculus.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "OTHER= Phosphorothioate backbone. All cytidines
FT                    are 5-methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
XX
PN   US2004115640-A1.
XX
PD   17-JUN-2004.
XX
PF   11-DEC-2002; 2002US-00317803.
XX
PR   11-DEC-2002; 2002US-00317803.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Myers K,  Dobie KW;
XX
DR   WPI; 2004-449380/42.
XX
PT   New oligonucleotide compound that inhibits expression of Angiopoietin-2,
PT   useful for preparing a composition for treating hyperproliferative
PT   disorder, e.g., cancer.
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```
XX
PS   Example 16; SEQ ID NO 106; 102pp; English.
XX
CC   The invention relates to a compound targeted to a nucleic acid molecule
CC   encoding the human Angiopoietin-2 polypeptide. The compound is an
CC   antisense oligonucleotide that specifically hybridises with the nucleic
CC   acid and inhibits expression of the polypeptide. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage
CC   i.e. a phosphorothioate linkage, at least one modified sugar moiety,
CC   preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified
CC   nucleobase comprising a 5-methylcytosine. The antisense compounds are
CC   useful for modulating the expression of the human Angiopoietin-2
CC   polypeptide and in preparation of a composition for treating
CC   hyperproliferative disorders, e.g. cancer. This sequence represents an
CC   antisense oligonucleotide targeted to DNA encoding the murine
CC   Angiopoietin-2 polypeptide of the invention.
XX
SQ   Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        817 ACGGAGAAGTCCCTCAC 833
              |||||||||  | |||||
Db         19 ACGGAGAAGGCTCTCAC 3


RESULT 1651
ADP68684/c
ID   ADP68684 standard; DNA; 20 BP.
XX
AC   ADP68684;
XX
DT   09-SEP-2004  (first entry)
XX
DE   Mouse PPAR-alpha antisense oligonucleotide seqid 120.
XX
KW   cytostatic; gene therapy; PPAR-alpha;
KW   peroxisome proliferator-activated receptor-alpha; PPAR-alpha modulator;
KW   PPAR-alpha associated disorder; hyperproliferative disorder; mouse;
KW   antisense oligonucleotide; antisense technology; ss.
XX
OS   Mus musculus.
XX
PN   US2004115637-A1.
XX
PD   17-JUN-2004.
XX
PF   11-DEC-2002; 2002US-00317500.
XX
PR   11-DEC-2002; 2002US-00317500.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Mckay R,  Dobie KW;
XX
DR   WPI; 2004-449378/42.
XX
PT   New oligonucleotide compound that inhibits expression of PPAR-alpha,
PT   useful for preparing a composition for treating hyperproliferative
PT   disorders, e.g. cancer.
XX
PS   Example 16; SEQ ID NO 120; 121pp; English.
XX
CC   The invention describes a compound, having a sequence comprising 8-80 bp
CC   targeted to a nucleic acid encoding PPAR-alpha (peroxisome proliferator-
CC   activated receptor-alpha), that specifically hybridises with the nucleic
CC   acid encoding PPAR-alpha comprising 86001-bp sequence and inhibits
CC   expression of PPAR-alpha. Also described are: a method of inhibiting the
CC   expression of PPAR-alpha in cells or tissues; a method of screening for a
CC   modulator of PPAR-alpha; a diagnostic method for identifying a disease
CC   state; a kit or assay device comprising the compound; and a method of
CC   treating an animal having a disease or condition associated with PPAR-
CC   alpha. The oligonucleotide compound is useful for preparing a composition
CC   for treating hyperproliferative disorder e.g. cancer. This sequence
CC   represents a mouse peroxisome proliferator-activated receptor-alpha (PPAR
CC   -alpha) antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        599 TTGGGAAACTGGAGACC 615
              || |||||||| |||||
Db         17 TTCGGAAACTGCAGACC 1


RESULT 1652
ADP68800
ID   ADP68800 standard; DNA; 20 BP.
XX
AC   ADP68800;
XX
DT   09-SEP-2004  (first entry)
XX
DE   Mouse PPAR-alpha antisense oligonucleotide seqid 236.
XX
KW   cytostatic; gene therapy; PPAR-alpha;
KW   peroxisome proliferator-activated receptor-alpha; PPAR-alpha modulator;
KW   PPAR-alpha associated disorder; hyperproliferative disorder; mouse;
KW   antisense oligonucleotide; antisense technology; ss.
XX
OS   Homo sapiens.
XX
PN   US2004115637-A1.
XX
PD   17-JUN-2004.
XX
PF   11-DEC-2002; 2002US-00317500.
XX
PR   11-DEC-2002; 2002US-00317500.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Mckay R,  Dobie KW;
XX
DR   WPI; 2004-449378/42.
XX
PT   New oligonucleotide compound that inhibits expression of PPAR-alpha,
PT   useful for preparing a composition for treating hyperproliferative
PT   disorders, e.g. cancer.
XX
PS   Example 16; SEQ ID NO 236; 121pp; English.
XX
CC   The invention describes a compound, having a sequence comprising 8-80 bp
CC   targeted to a nucleic acid encoding PPAR-alpha (peroxisome proliferator-
CC   activated receptor-alpha), that specifically hybridises with the nucleic
CC   acid encoding PPAR-alpha comprising 86001-bp sequence and inhibits
CC   expression of PPAR-alpha. Also described are: a method of inhibiting the
CC   expression of PPAR-alpha in cells or tissues; a method of screening for a
CC   modulator of PPAR-alpha; a diagnostic method for identifying a disease
CC   state; a kit or assay device comprising the compound; and a method of
CC   treating an animal having a disease or condition associated with PPAR-
CC   alpha. The oligonucleotide compound is useful for preparing a composition
CC   for treating hyperproliferative disorder e.g. cancer. This sequence
CC   represents a mouse peroxisome proliferator-activated receptor-alpha (PPAR
CC   -alpha) antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;
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```
Qy        599 TTGGGAAACTGGAGACC 615
              || |||||||| |||||
Db          4 TTCGGAAACTGCAGACC 20


RESULT 1653
ADP96460
ID   ADP96460 standard; DNA; 20 BP.
XX
AC   ADP96460;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human DUSP6 antisense oligonucleotide ISIS103229.
XX
KW   Human; antisense; ss; dual specific phosphatase 6; DUST6; MAP kinase;
KW   extracellular signal related kinase; ERK; hyperproliferative disorder;
KW   developmental disorder; neural disorder; apoptotic disorder;
KW   chromosome 12q22-23.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone and all cytidines are 5
FT                    -methylcytidines"
FT   modified_base    1. .5
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl residue"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl residue"
XX
PN   US2004127451-A1.
XX
PD   01-JUL-2004.
XX
PF   09-FEB-2004; 2004US-00774888.
XX
PR   18-JUL-2002; 2002US-00199221.
XX
PA   (MONI/) MONIA B P.
PA   (COWS/) COWSERT L M.
PA   (DOBI/) DOBIE K W.
XX
PI   Monia BP,  Cowsert LM,  Dobie KW;
XX
DR   WPI; 2004-499137/47.
XX
PT   New antisense oligonucleotides which inhibit the expression of dual
PT   specific phosphatase 6, useful for e.g. treating disease or condition
PT   associated with the expression of dual specific phosphatase.
XX
PS   Example 15; SEQ ID NO 29; 54pp; English.
XX
CC   The invention relates to an oligomeric compound (an antisense
CC   oligonucleotide) 8-50 nucleobases in length comprising a sequence
CC   complementary to a nucleic acid molecule encoding dual specific
CC   phosphatase 6 (DUST6, phosphorylating Map kinase and extracellular signal
CC   related kinase, ERK) appearing as ADP96435. Also included are a
CC   composition comprising the oligonucleotide (and a pharmaceutical carrier
CC   or diluent) and a method of inhibiting the expression of dual specific
CC   phosphatase 6 in cells or tissues comprising contacting the cells or
CC   tissues with the antisense oligonucleotide. The oligomeric compound
CC   inhibits the expression of dual specific phosphatase 6 by at least 60%,
CC   and hybridises to nucleobases 369-389, 480-500, 657-677, 713-818, 923-
CC   1028, 1196-1216, 12771693, or 1757-1860 in the coding region of SEQ ID
CC   NO: 4. The oligomeric compound hybridises to nucleobases 53-195 in the 5'
CC   UTR of ADP96435 or to nucleobases 1757-1860 in the 3' UTR of ADP96435.
CC   The antisense compound is useful for inhibiting the expression of dual
CC   specific phosphatase 6 and for treating a disease or condition associated
CC   with the expression of dual specific phosphatase 6 (e.g. a
CC   hyperproliferative disorder, developmental disorder, neural disorder or a
CC   apoptotic disorder. These may also be used as research reagents and
CC   diagnostics, to distinguish between functions of various members of a
CC   biological pathway, and in the treatment of a disease or disorder, which
CC   can be treated by modulating the expression of dual specific phosphatase
CC   6. The DUST6 gene is located on chromosome 12q22-23. The present sequence
CC   is an antisense oligonucleotide targeting DUST6.
XX
SQ   Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 20;
  Best Local Similarity   88.2%;  Pred. No. 1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        445 AAGATCTCCACTGAGGA 461
              |||||||||||||  | |
Db          1 AAGATCTCCACTGGGAA 17


RESULT 1654
AAQ03910
ID   AAQ03910 standard; DNA; 21 BP.
XX
AC   AAQ03910;
XX
DT   25-MAR-2003  (revised)
DT   24-AUG-1990  (first entry)
XX
DE   HPV6 typing probe (MY12) for use with L1 consensus primers.
XX
KW   Papilloma-virus; consensus primer; PCR; probe; ss.
XX
OS   Synthetic.
XX
PN   WO9002821-A.
XX
PD   22-MAR-1990.
XX
PF   09-SEP-1988;   88US-00243486.
XX
PR   09-SEP-1988;   88US-00243486.
PR   10-MAR-1989;   89US-00322550.
XX
PA   (CETU ) CETUS CORP.
XX
PI   Manos MM,  Wright DK,  Ting Y;
XX
DR   WPI; 1990-116005/15.
XX
PT   Detecting and typing human papilloma-virus - using consensus primers in
PT   polymerase chain reaction to amplify particular genomic regions.
XX
PS   Disclosure; Table 5; 33pp; English.
XX
CC   Genome position 6813-6833. See also AAQ03898-Q03949. (Updated on 25-MAR-
CC   2003 to correct PR field.)
XX
SQ   Sequence 21 BP; 6 A; 8 C; 1 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 21;
  Best Local Similarity   88.2%;  Pred. No. 1.1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1677 CCCCAACTACATCTTCC 1693
              ||  |||||||||||||
Db          4 CCGTAACTACATCTTCC 20


RESULT 1655
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```
AAQ27035
ID   AAQ27035 standard; DNA; 21 BP.
XX
AC   AAQ27035;
XX
DT   21-JAN-1993  (first entry)
XX
DE   HCV primer P6.
XX
KW   Recombinant vector; E. coli; diagnostic; reagent; type C hepatitis; PCR;
KW   polymerase chain reaction; ss.
XX
OS   Synthetic.
XX
PN   JP04179482-A.
XX
PD   26-JUN-1992.
XX
PF   11-NOV-1990;   90JP-00304417.
XX
PR   11-NOV-1990;   90JP-00304417.
XX
PA   (TOKU ) TOKUYAMA SODA KK.
XX
DR   WPI; 1992-263663/32.
XX
PT   Hepatitis C virus antigen expressed as recombinant in E.coli - useful for
PT   diagnosis of hepatitis C virus infection.
XX
PS   Disclosure; Page 64; 66pp; Japanese.
XX
CC   The sequences given in AAQ27030-77 are primers. These were used to
CC   amplify the claimed hepatitis C virus genes of the invention which could
CC   then be inserted into an E. coli vector. The polypeptides encoded by the
CC   vectors were useful as diagnostic reagents for type C hepatitis and they
CC   may be produced efficiently by recombinant methods
XX
SQ   Sequence 21 BP; 1 A; 5 C; 13 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 21;
  Best Local Similarity   88.2%;  Pred. No. 1.1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        228 GAGTGGTGGTGGTGGCG 244
              ||| ||||| |||||||
Db          5 GAGGGGTGGCGGTGGCG 21


RESULT 1656
AAV05593
ID   AAV05593 standard; DNA; 21 BP.
XX
AC   AAV05593;
XX
DT   22-MAY-1998  (first entry)
XX
DE   Primer for hepatitis C virus antigen DNA.
XX
KW   non-A non-B hepatitis virus; NANBH; hepatitis C virus; HCV; antigen;
KW   diagnosis; detection; PCR primer; ss.
XX
OS   Synthetic.
OS   Hepatitis virus.
XX
PN   JP05176774-A.
XX
PD   20-JUL-1993.
XX
PF   18-DEC-1991;   91JP-00354708.
XX
PR   18-DEC-1990;   90JP-00412020.
XX
PA   (SHIM/) SHIMOTONO K.
PA   (GREC ) GREEN CROSS CORP.
XX
DR   WPI; 1993-260858/33.
XX
PT   Protein contg. non-A non-B hepatitis antigen fragment - prepd. by
PT   culturing transformants transformed by vector contg. base sequence coding
PT   specified aminoacid sequences, used for detecting hepatitis.
XX
PS   Example 1; Page 8; 53pp; Japanese.
XX
CC   The present sequence is a primer for a DNA encoding a non-A non-B
CC   hepatitis virus (NANBH) or hepatitis C virus (HCV) antigen, useful for
CC   diagnosis or detection
XX
SQ   Sequence 21 BP; 1 A; 5 C; 13 G; 2 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 21;
  Best Local Similarity   88.2%;  Pred. No. 1.1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        228 GAGTGGTGGTGGTGGCG 244
              ||| ||||| |||||||
Db          5 GAGGGGTGGCGGTGGCG 21


RESULT 1657
AAQ56381
ID   AAQ56381 standard; DNA; 21 BP.
XX
AC   AAQ56381;
XX
DT   25-MAR-2003  (revised)
DT   29-JUL-1994  (first entry)
XX
DE   L1 consensus primer HPV6 typing probe MY12.
XX
KW   Human papilloma virus; amplification; polymerase chain reaction; PCR;
KW   detection; assay; ss.
XX
OS   Synthetic.
XX
PN   US5283171-A.
XX
PD   01-FEB-1994.
XX
PF   15-FEB-1991;   91US-00651356.
XX
PR   09-SEP-1988;   88US-00243486.
PR   10-MAR-1989;   89US-00322550.
PR   29-AUG-1989;   89WO-US003747.
XX
PA   (UYRP ) UNIV ROCHESTER.
PA   (HOFF ) HOFFMANN LA ROCHE INC.
XX
PI   Wolinsky SM,  Broker TR,  Ting Y,  Manos MM,  Wright DK;
XX
DR   WPI; 1994-048082/06.
XX
PT   Detection of genital human papilloma virus - by PCR amplification using
PT   defined consensus primer pairs.
XX
PS   Disclosure; Page 8; 13pp; English.
XX
CC   The sequence is that of HPV6 typing probe MY12 for use with L1 consensus
CC   primers as part of a simple and rapid assay method for detecting and
CC   typing HPV in biological samples. (Updated on 25-MAR-2003 to correct PF
CC   field.)
XX
SQ   Sequence 21 BP; 6 A; 8 C; 1 G; 6 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 13.8;  DB 1;  Length 21;
  Best Local Similarity   88.2%;  Pred. No. 1.1e+03;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;
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